

STATE OF CALIFORNIA
THE RECLAMATION BOARD
REGULAR BOARD MEETING
OPEN SESSION

RESOURCES BUILDING
1416 NINTH STREET
AUDITORIUM
SACRAMENTO, CALIFORNIA

FRIDAY, MAY 18, 2007

9:40 A.M.

KATHRYN S. KENYON, CSR
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PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

APPEARANCES

BOARD MEMBERS

Mr. Benjamin Carter, President

Mr. Butch Hodgkins, Vice President

Ms. Lady Bug Doherty, Secretary

Ms. Rose Marie Burroughs, Member

Ms. Teri Rie, Member

STAFF

Mr. Jay Punia, General Manager

Mr. Stephen Bradley, Chief Engineer

Mr. Eric Butler, Senior Engineer

Ms. Nancy Finch, Legal Counsel

Mr. Dan Fua, Supervising Engineer

Mr. Scott Morgan, Legal Counsel

Ms. Lorraine Pendlebury, Staff Assistant

Ms. Jill Phinney, Support Staff

ALSO PRESENT

Mr. John Andrew, Department of Water Resources

Professor Robert Bea, UC Berkeley

Mr. Paul Brunner, TRLIA

Mr. Tom Eres, Hofman Ranch

Mr. Tom Foley, Concerned Citizens for Responsible Growth

APPEARANCES CONTINUED

Mr. Rod Mayer, Department of Water Resources

Mr. Kurt McClain

Mr. Robert Naylor, Rice River Ranch

Mr. James Pearson

Mr. Ric Reinhardt, MBK Engineers

Mr. Thomas Rice, Rice River Ranch

Mr. Maurice Roos, Department of Water Resources

Mr. James Sandner, U.S. Army Corps of Engineers

Mr. Scott Shapiro, TRLIA, M&T Rancher

Mr. Ward Tabor, Department of Water Resources

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INDEX

	PAGE
1. Roll Call	1
2. Closed Session	1
3. Approval of Minutes - February 16, 2007, & February 26, 2007	2
4. Approval of Agenda	2
5. Public Comments	4
6. Report of Activities of the Department of Water Resources	13
7. Three Rivers Levee Improvement Authority Monthly Report	34

REQUESTED ACTIONS

8. Applications	
A. Application No. 18170, Three Rivers Levee Improvement Authority, Yuba County	52
9. Board's letter to U.S. Army Corps of Engineers	176

INFORMATIONAL BRIEFINGS

10. Hurricane Katrina: Lessons for California's Levees	126
11. Global Climate Change	
A. Global Climate Change and its Impacts on California.	190
B. Sea Level and Flood Stage Planning Targets	155

INDEX CONTINUED

	PAGE
BOARD REPORTS	
12. Briefing on Government Land Acquisition Laws and Determination of Fair Market Value	207
13. Board Comments and Task Leader Reports	232
14. Report of Activities of the General Manager	234
15. Future Agenda	242
16. Adjourn	264
Reporter's Certificate	265
PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345	

1 PROCEEDINGS

2 PRESIDENT CARTER: Ladies and gentlemen, we'll go
3 ahead and get started. We'll open our Reclamation Board
4 meeting.

5 Jay, if you could call the roll, please.

6 GENERAL MANAGER PUNIA: Jay Punia, general
7 manager, Reclamation Board.

8 For the record, except Board Member Teri Rie, the
9 rest of the Board members are present.

10 PRESIDENT CARTER: Okay. Very good. So we'll
11 move into closed session to discuss litigation of the
12 Natural Resources Defense Council versus the Reclamation
13 Board case, as noted on the agenda, pursuant to Government
14 Code Section 11126(e)(2)(A).

15 (Thereupon the Board entered into closed
16 session.)

17 PRESIDENT CARTER: Good morning, ladies and
18 gentlemen. Welcome to the State Reclamation Board meeting
19 for May 18th.

20 For the record, the Board is now coming out of
21 closed session. We did have closed session this morning,
22 starting at 8:30, to discuss litigation as noted on agenda
23 Item 2 of the published agenda. No discussions or action
24 was taken during the closed session.

25 So at this point, we are on to Item No. 3, which

1 is Approval of the Minutes, February 16th, 2007; and
2 February 26th, the subcommittee minutes.

3 I will entertain a motion.

4 SECRETARY DOHERTY: Have you had a chance to read
5 them?

6 PRESIDENT CARTER: Has everybody had a chance to
7 read them?

8 SECRETARY DOHERTY: And the subcommittee?

9 VICE PRESIDENT HODGKINS: A chance, yes.

10 SECRETARY DOHERTY: Well, I make a motion that we
11 approve these minutes as presented.

12 PRESIDENT CARTER: We have a motion to approve.

13 Is there a second?

14 VICE PRESIDENT HODGKINS: I will second.

15 PRESIDENT CARTER: We have a motion and a second.

16 Any discussion?

17 All those in favor, indicate by saying "aye."

18 (Ayes.)

19 PRESIDENT CARTER: And opposed?

20 Okay. The motion carries.

21 Very good. We're on to Item 4, Approval of
22 Today's Agenda. I am aware of one proposed change and
23 that is a minor change on Item 11, under Global Climate
24 Change --

25 SECRETARY DOHERTY: I'm sorry. February -- that

1 was February 16th. Did you include February 26th in
2 that --

3 PRESIDENT CARTER: I'm sorry. I misunderstood the
4 motion. I thought the motion was to approve both.

5 SECRETARY DOHERTY: The motion was to approve
6 both.

7 PRESIDENT CARTER: And the second was to approve
8 both?

9 VICE PRESIDENT HODGKINS: Yes.

10 PRESIDENT CARTER: Okay. So the decision stands.

11 We had a request from Mr. Roos to go ahead of
12 Mr. Andrews, so we would hear Item 11.B before Item 11.A.

13 Any objections to that?

14 VICE PRESIDENT HODGKINS: None.

15 PRESIDENT CARTER: Okay.

16 Are there any other suggested changes to the
17 agenda for today? Nothing from staff?

18 GENERAL MANAGER PUNIA: No. No proposed changes
19 from staff.

20 PRESIDENT CARTER: Okay. If not, we'll entertain
21 a motion to approve the minutes with the change of hearing
22 Item 11.B before 11.A.

23 Do we have a motion?

24 BOARD MEMBER BURROUGHS: I so move.

25 PRESIDENT CARTER: We have a motion.

1 And a second?

2 VICE PRESIDENT HODGKINS: Second.

3 PRESIDENT CARTER: Any discussion?

4 All those in favor indicate by saying "aye."

5 (Ayes.)

6 PRESIDENT CARTER: And opposed?

7 Motion carries. Great.

8 At this time, we're at Item 5, which is Public
9 Comments. This is the time where the Board invites any
10 member of the public to address the Board on any items
11 that are not agendized for today.

12 We do have time limits on these, which we are
13 trying to stay on schedule. So we request the public
14 comments be limited to five minutes for these. And we do
15 also ask that people fill out these little three-by-five
16 cards so we know to recognize you there in the audience.
17 These are available either from Lorraine Pendlebury at the
18 front desk or at the desk to the entrance of the
19 auditorium. So please do fill those out. You are welcome
20 to address the Board.

21 I'm going to go in the order that the stack came
22 to me.

23 So Mr. Naylor, did you wish to address the Board?

24 BOARD MEMBER BURROUGHS: Mr. President, before our
25 presentation, could we have somebody be timer and let the

1 presenter know that they have one minute left after the
2 five minutes?

3 PRESIDENT CARTER: I typically kind of watch the
4 clock and signal.

5 BOARD MEMBER BURROUGHS: You will take care of it?

6 PRESIDENT CARTER: Yes.

7 MR. NAYLOR: Mr. President, Members, my name is
8 Robert Naylor. I'm here representing Thomas Rice, who
9 will have a couple of remarks after mine.

10 I will be less than five minutes because we are
11 not commenting on an agenda item. We are commenting on
12 the proposed setback levee, in the Feather River area, by
13 TRLIA. And I just really want to alert you to the issues
14 that we'll be raising in more detail when that matter
15 comes before you, I guess, in July.

16 All farmers favor repair in place. It preserves
17 the most farmland, and that's certainly our first
18 position. But we've been looking at the intermediate
19 setback alternatives. And I don't know if anybody can see
20 even this blown-up map, but I'm going to try to -- try to
21 kind of illustrate our issue.

22 TRLIA, in its environmental impact report and its
23 alternatives analysis, considered an intermediate setback
24 alternative. The proposed full setback is this line right
25 here, the one farthest from the river and the farthest

1 from the existing levee. Oddly, this line affects about 8
2 to 12 parcels at the margin that could be avoided if the
3 line were set even 500 feet farther west.

4 And looking at the alternatives analysis, and
5 looking at the environmental impact report, we find that
6 by TRLIA's own documents, the full setback levee is not
7 the most cost effective in terms of benefits versus cost.
8 And part of that reason is, they have to acquire 300, 400
9 acres more land, which happens to be land closest to the
10 development and the land farthest away from the existing
11 levee.

12 And it also, if you look at the documents of the
13 flood control benefits, we're talking about the difference
14 between whatever setback alternative was analyzed, and
15 it's kind of hard to tell, but the environmental impact
16 report was kind of an approximation of a setback
17 alternative.

18 It might have been as much as a thousand feet west
19 of the existing -- of the full setback -- west of the full
20 setback alternative. If you just go -- if that's the
21 alternative analyzed, the difference in flood control
22 benefits is a difference of 4.2 freeboard feet below the
23 top of the levee, and the expected 200-year flood level,
24 versus 4.6 feet.

25 And if you brought the levee a little bit farther

1 east from that thousand feet to, say, half that much, you
2 would have almost -- almost a speculative difference in
3 flood control benefits, and yet you would save 10 to 12
4 parcels. And that's the basic point. We are just urging
5 this Board to take a good hard look at these documents
6 that are before you, ask tough questions. We think an
7 intermediate compromise is available if you decide not to
8 go with the repair in place, which is everybody's first
9 preference.

10 Thank you.

11 SECRETARY DOHERTY: Did you say to move it east?

12 MR. NAYLOR: Well, it was a little confusing. I
13 was saying, don't move the full setback east. If these --
14 this is their map. And I'm not sure how this map compares
15 with what the environmental impact report actually
16 analyzed. But I am saying that the EIR said that
17 two-tenths of a mile is what the -- west of the full
18 setback, would be an intermediate setback. And that's
19 over a thousand feet.

20 So if you went less than a thousand feet west for
21 an intermediate setback, you would still preserve a lot of
22 parcels, and that ought to be taken into consideration
23 because it's expensive. There are limited bond funds and
24 you are affecting agricultural and the preservation of
25 agricultural, which Mr. Rice will address.

1 PRESIDENT CARTER: Thank you.

2 VICE PRESIDENT HODGKINS: May I ask a question?

3 PRESIDENT CARTER: Absolutely.

4 VICE PRESIDENT HODGKINS: I understand that this
5 is a significant concern. I want to be sure that you
6 understand at least, from my point of view, that one of
7 the questions that will be important to me is knowing
8 whether or not you raised these issues at the time the
9 TRLIA Board made a decision on which alignment they were
10 going to pursue. Because I hate to get -- see this Board
11 get in a situation where the local flood control agency
12 can make a decision as to how they would like to proceed,
13 and then find out that all of their decisions are going to
14 get second-guessed and potentially rethought by this
15 Board, which just isn't expedient in delivering improved
16 flood protection to do business that way.

17 MR. NAYLOR: Well, I think I should answer that
18 question perhaps in writing or perhaps at a later hearing,
19 because I was just brought into this about six weeks ago,
20 which was after the environmental impact report was
21 approved by TRLIA.

22 Mr. Rice may have some comments. And we'll kind
23 of gather what was made available to TRLIA in their
24 decision making process and let you know.

25 VICE PRESIDENT HODGKINS: Thank you.

1 PRESIDENT CARTER: Thank you, Mr. Naylor.

2 Mr. Rice?

3 MR. RICE: I'm Thomas Rice, owner of Rice River
4 Ranch.

5 Actually, I will address your question before I
6 make my comments. I brought Mr. Naylor in on this several
7 weeks ago, after I had been at just about every TRLIA
8 meeting, talked with the TRLIA staff, talked also with
9 their Bender Rosenthal agents, and had been trying to get
10 collaboration and compromise on this issue throughout the
11 process. So this is not a new issue being brought before
12 you.

13 What I would like to do is say, we are here not to
14 try and look for one extreme or the other. We are trying
15 to have the Board ask the tough questions and find good,
16 balanced public policy here.

17 We want flood safety. My family has been flooded
18 out three times. We know the risk. What we want to do is
19 make sure we have public safety that is protecting your
20 communities and the diversity of the communities, that is
21 protecting the urban and is protecting the agricultural as
22 well.

23 We are losing a lot of agricultural land. We need
24 our farms. We need our family farms. But it's not just a
25 matter of the agricultural itself. That agricultural area

1 there is also a public safety buffer. You will not find
2 somebody who more jealously guards the safety of the
3 levees than the farmers whose lives and livelihoods depend
4 on those levees working. We watch them; we patrol them;
5 we're the ones who call the sheriffs; we're the ones chase
6 people off. We are your first line of defense on the
7 levees, versus just a bunch of backyards.

8 And the other point that related to that is, in
9 the case that there ever needs to be an evacuation, what
10 would you rather have next to the levees? A large
11 compacted urban settlement right up to the toe or sparsely
12 populated agricultural lands that can more readily react
13 and not be in as much of a crisis should an evacuation
14 have to occur. Hopefully, our protection never gets us
15 there.

16 But it's not just about the agriculture. It is
17 really that buffer zone that protects the levees and
18 protects the public safety too.

19 PRESIDENT CARTER: Thank you very much.

20 Any questions for Mr. Rice?

21 Thank you.

22 Mr. Pearson?

23 MR. PEARSON: Good morning to you all. My name is
24 James Pearson. I live with my wife, Mary, and family at
25 798 Plumas Avenue, Marysville. That's approximately a

1 quarter to a half a mile east of the present Feather River
2 levee.

3 I'm not a good public speaker, so with your
4 indulgence, I would like to read something that I have
5 prepared.

6 My purpose for addressing the Board today is to
7 make you all aware of TRLIA's proposal to remove our
8 80-acre orchard and others nearby, and then to borrow the
9 soil in order to build a setback levee along the Feather
10 River in an effort to stop flooding during high water
11 flows.

12 Obviously, I strongly oppose this action as
13 productive orchards may be lost and family farms will be
14 destroyed. I stress "productive" orchards and offer as
15 evidence a plaque that our family was awarded in 2000.
16 And this plaque reads, "Sunsweet Growers Incorporated.
17 Superior Performance Award, 2000, for the highest gross
18 return per acre of any member of the Yuba local.
19 Presented to James and Mary Pearson."

20 I ask this Board to please urge TRLIA to
21 diligently evaluate other nearby vacant lands for the use
22 of the levee construction. There are suitable vacant
23 parcels east of the Feather River Boulevard and south of
24 Ella Avenue, extending southward approximately one and a
25 half miles.

1 For example, I have photos taken this week on Ella
2 Avenue, which I would like to present to you.

3 Photo No. 1 shows the borrow pit which was
4 excavated in 1997, and the soil was used to repair the
5 flood damaged levee.

6 Photo No. 2 shows a "for sale" sign listing
7 74 acres which are available.

8 Photos No. 3 and 4 show that this 74-acre parcel
9 is vacant and available.

10 I sincerely believe it's in the best interest of
11 our community to leave orchards along the Feather River as
12 they are for four major reasons: Number one, to sustain
13 the local economy, agricultural economy; number 2, to
14 serve as a buffer zone; and number 3, to provide for
15 esthetic reasons for a busy and sometimes hectic society;
16 and fourth, the orchards and the cover crops that are to
17 absorb carbon dioxide from our polluted air.

18 One bit of advice that I was recently given: A
19 wise person recently said to me, "We put man on the moon.
20 Surely, we can fix our levees in place and preserve the
21 orchards."

22 Thank you.

23 PRESIDENT CARTER: Thank you. Any questions for
24 Mr. Pearson?

25 BOARD MEMBER BURROUGHS: Just a comment.

1 Congratulations on your award.

2 MR. PEARSON: Thank you very much. I didn't do it
3 alone. It was a family operation.

4 PRESIDENT CARTER: Thank you.

5 MR. PEARSON: Thank you.

6 PRESIDENT CARTER: Okay. That's all I have.

7 There are no other people who wish to address the
8 Board on unagendized items?

9 Very good. Thank you.

10 Thank you all for coming. Now we will move on to
11 Item 6, Report of the Activities of the Department of
12 Water Resources. I note, we have a slight change in the
13 agenda. Mr. Rod Mayer is back with us this month.

14 Welcome back.

15 MR. MAYER: Thank you, President Carter. Good
16 morning, Members of the Board. Surprise, just when you
17 think you had it figured out and Keith was going to keep
18 doing this, I'm back. Trying to keep you on your toes.

19 So in the interest of time I don't intend to go
20 through every topic in the report that you should have
21 received already, but I will cover a number of them.

22 Let's talk about a few things that aren't in your
23 report. On the water conditions, looking back, what a
24 difference a year can make. About this time last year we
25 were wrapping up flood fights. In fact, we had some

1 continuing at this time in the San Joaquin system. It's
2 one of the wettest years that we've ever dealt with.

3 And here we are, a year later with -- at May 1st,
4 we're at 65 percent of the average precipitation statewide
5 for this time. And our snowpack is about 30 percent of
6 average.

7 Now, a more accurate indicator of snowpack is
8 really the April 1st number which is about 40 percent.
9 Even so, that's a dramatic change from a year ago. And of
10 course, it results in our forecasted water index, water
11 year index, being very poor. For the Sacramento Valley,
12 the forecast is a dry year; and for the San Joaquin
13 Valley, a critical year.

14 Moving on to the next topic, levee evaluations. I
15 know you have been briefed a number of times on the levee
16 evaluation program for the urban levees, and so I wanted
17 to note some current developments. In April, we had our
18 fourth meeting of the Independent Consulting Board. And
19 that Board has Chris Groves, George Sills, and Professor
20 Ray Seed on it, and they provided a lot of good advice and
21 review of the work.

22 Now, one of the major findings of this Board that
23 is creating quite a lot of interest and concern in the
24 program is that they are recommending a more stringent
25 exit gradient for underseepage than for what the Corps'

1 standard has been for a number of years, especially since
2 the Levee Underseepage Task Force came out with its
3 findings back in 2003. And the Board is now asking that
4 the exit gradient for the design be 0.4, whereas currently
5 it's been at 0.5. That means that underseepage repairs,
6 such as berms and slurry walls, that perhaps don't get
7 down to a good cut off, or relief well systems, need to be
8 more robust than we have been planning. And so it will
9 drive up the costs of some of the repair work to address
10 underseepage, unless, in some instances, we're able to
11 construct a slurry wall and get a positive cut off. It
12 probably won't make much difference in those cases.

13 The Corps is also considering revising its
14 underseepage criteria and geotechnical evaluation
15 procedures. And I know you're aware of this, that they
16 are headed towards a risk and uncertainty approach on
17 this, in that the Corps will be briefing you in the future
18 as they're making progress on this.

19 But meanwhile, we're in a position of not knowing
20 exactly what exit gradient to design to, and we're trying
21 to resolve that, but it looks like we're headed to 0.4,
22 based upon, at least the Independent Consulting Board
23 recommendations, as well as the Corps seems to be headed
24 in that direction.

25 PRESIDENT CARTER: Mr. Mayer, do you have any idea

1 what potential implications are for 784 or SAFCA of this?
2 Do you know, the repairs that we've made so far, do they
3 satisfy this 0.4 exit gradient or not?

4 MR. MAYER: I am not certain about that. I do
5 know the future work as planned does have an effect. I've
6 heard that we have more miles of work that otherwise
7 wouldn't be triggered. And wherever there's a seepage
8 berm, I would expect, it would increase the dimensions of
9 the seepage berm unless it's already met the 300-foot
10 maximum dimensions that's required.

11 But I don't know the details about past work.
12 That's a good question.

13 Maybe there's somebody from TRLIA that could
14 answer that.

15 PRESIDENT CARTER: We've had some issues with kind
16 of moving targets on standards in the past and projects
17 having to be changed and rescope. And so I'm just
18 wondering if stuff that we've done in the past, around the
19 Sacramento area in particular and some in Sutter Yuba
20 County, if that's going to have to be redone as well.

21 MR. MAYER: Well, there's certainly a lot of
22 underseepage and true seepage work that will have to be
23 done. The Corps' practice in doing levee repairs, where
24 they are doing seepage berms as to the repair technique,
25 where there's room, there's not development right up to

1 the levee toe. In the past, they had very narrow seepage
2 berms, that typically go out 20, 30, 40 feet. And in
3 general, we're likely to find that those are inadequate.
4 Of course, that's what levee evaluation programs do is
5 look at things like that. But the more recent work of
6 TRLIA, I can't answer your questions. So maybe Paul could
7 help on that.

8 MR. BRUNNER: Paul Brunner, executive director for
9 TRLIA.

10 We did -- we're aware of the new requirement
11 coming. I've asked the question -- feedback from my
12 consultants -- the Bear is fine, the work that we've done
13 on the Bear. The Western Pacific Interceptor Canal and
14 also on the Yuba, we're still waiting for that response to
15 come back as to exactly where we are on that.

16 So I can come back with the answer in the future
17 as we factor that in from my consultants. So least one
18 sector is fine.

19 PRESIDENT CARTER: Thank you.

20 BOARD MEMBER RIE: Can I ask, what is the 0.4
21 being based on? Why is that the recommended?

22 MR. MAYER: Let me add it to my previous comments.
23 This is only become recommended for urban levees. So the
24 idea is that for urban levees, we need to have a very
25 robust standard. That's the thinking at this point by the

1 Corps, and so we would like to be very comfortable, have a
2 high safety factor with respect to underseepage and so
3 that's -- that's the idea.

4 When asked what is our urban levee under the Corps
5 criteria, they haven't answered that yet. They are not
6 quite sure. Of course, it's highly urbanized. It's easy.
7 If there is a small community, it's not so easy.

8 BOARD MEMBER RIE: Well, I'm wondering, why not
9 recommend 0.3?

10 MR. MAYER: Well, that's been debated as well.
11 What it boils down to is, what is the safety factor that
12 the Corps will be comfortable with? Generally, you would
13 get a critical exit gradient which would trigger boils at
14 about 0.8 and depending upon the density of the soil
15 particles. And therefore, a 0.4 exit gradient gives you a
16 safety factor of two. And they are thinking that that is
17 an appropriate safety factor for this very important
18 phenomena and for urban areas.

19 BOARD MEMBER RIE: Have we seen any failures at
20 0.4?

21 MR. MAYER: Well, we have seen lots of seepage
22 failures. And the issue is that when you are -- when you
23 are designing levees for underseepage, you don't know all
24 the imperfections. You cannot find them. You can't
25 possibly drill everywhere and look at the -- out beyond

1 the levee toe everywhere.

2 So you have to generalize what you see out there
3 and then understand that there are a number of defects and
4 other things that come into play that's an appropriate
5 safety factor.

6 VICE PRESIDENT HODGKINS: Did I hear you say that
7 generally where slurry walls are used, it's going to be
8 easy to achieve the 0.4?

9 MR. MAYER: Yes, I think so, because, in general,
10 with slurry walls, we are actually achieving a cutoff. We
11 are taking them down to a depth where we connect to an
12 impervious stratum, and then you are not going to have any
13 significant exit gradient in that situation.

14 VICE PRESIDENT HODGKINS: Can I ask, are you aware
15 of anywhere in the valley where measurements of the
16 effectiveness of a slurry wall have been made?

17 I'm a little concerned here that we're putting a
18 huge reliance on the slurry walls. And having watched
19 their construction, I'm not crazy about driving more
20 projects to slurry walls unless we're absolutely certain
21 they perform as we think they do. And I know, we used to
22 look at that in Sacramento and there was none. That was
23 lost after the '97 flood, unfortunately. But are you
24 aware of anyplace else?

25 MR. MAYER: I'm only aware of a few situations

1 where we actually monitored water levels on either side of
2 the slurry wall. One's in the Pocket area, where there's
3 some piezometers. And I believe there's also some in the
4 Natomas Basin. I don't recall ever seeing readings on the
5 Natomas ones. I have seen the readings of piezometers in
6 the Pocket area. The problem with the Pocket area is, the
7 slurry wall didn't achieve cutoff. It didn't go deep
8 enough. It was only, like, 30 feet deep, sitting on top
9 of a point bar deposit. It should go much deeper than
10 that. So consequently, we saw very little head loss and at
11 that location.

12 But in general, no, I haven't seen that. The way
13 we would do this is with piezometers. And of course,
14 we've seen, there's been deep slurry walls on the American
15 River, for instance, down for about 70 feet and I think
16 it's performed fairly well. It hasn't been truly tested
17 though with real high water since installation.

18 VICE PRESIDENT HODGKINS: And Natomas slurry walls
19 are the same. They will never have cutoff walls.

20 I -- I will let it go for now. But I would be
21 interested in seeing either from the Corps nationwide or
22 from DWR someplace where they have proven the design of
23 those, given the quality control that's involved in trying
24 to mix that slurry and get it in place.

25 SECRETARY DOHERTY: Mr. Mayer, somebody mentioned

1 to me that in Colusa where they put the slurry wall, that
2 in the past, before the slurry wall was put in, the
3 seepage came out, kind of like a river, and went down into
4 a creek and went away. The slurry wall is in now, and now
5 the water is coming into everybody's yards, which it
6 didn't before. Now, that's just one year. So who knows
7 what the next year will be. But I just thought I would
8 mention that.

9 Now, one other thing, you said that you had to
10 increase the width of the berm. Is that what you said
11 just previous to --

12 MR. MAYER: Well, what I said is, if the exit
13 gradient criteria changes from 0.5 to 0.4, one would
14 expect that you would have to make the seepage berm go out
15 farther from the levee to address that.

16 Because generally what happens is, you have a high
17 exit gradient near the levee toe, you construct the
18 seepage berm to capture that, and you constructed it out
19 to the point where it drops off to 0.5. So now, it's only
20 0.4 again, take it out further, so it captures everything
21 from an exit gradient of 0.4.

22 SECRETARY DOHERTY: Okay. So it's not a change in
23 the engineering. It's just a change in -- because of the
24 higher numbers.

25 MR. MAYER: No. It's a change in the actual

1 amount of construction, the size of the berm.

2 SECRETARY DOHERTY: All right.

3 MR. MAYER: And it could also affect the berm
4 thickness, perhaps, as a result of wanting to have other
5 dimensions controlled on the design.

6 I would like to follow up a little bit with you
7 perhaps on the performance up at Colusa.

8 I also, as I'm thinking about it, there was a
9 slurry wall on Feather River that hasn't been performing
10 well. There's been a geotechnical investigation. And I
11 haven't heard the results of the geotechnical
12 investigation.

13 Okay. Moving on, next week, there's three days of
14 local workshops planned by DWR and the Corps on this local
15 evaluations program. And Board members' participation is
16 very important in this. So we've asked Jay Punia to
17 participate.

18 One of the things that we expect to happen is that
19 local agencies being concerned about being mapped by
20 FEMA -- currently, they are grandfathered and they are not
21 mapped by FEMA -- they have an opportunity to delay
22 mapping by up to two years through the new program that
23 FEMA has established called preliminary accredited levees,
24 where if there's a belief that the levee actually does
25 provide 100-year protection, they can submit an

1 application as the community.

2 And they will need the owner of the levee also to
3 sign off on the application that the owner thinks that the
4 levee provides 100-year protection.

5 The Rec Board is the owner, of course, for about
6 1600 miles of levees in the Central Valley. And many of
7 these levees, especially in Sacramento Valley, haven't
8 been grandfathered. We expect many of these communities
9 to come forward, asking that the Board sign off on these
10 preliminary accredited levee applications. And the basis
11 for signing off or not signing off may hang upon the levee
12 evaluation work that DWR is doing. So it's very important
13 we have the Board's participation in these workshops, as
14 this program moves forward.

15 In June, we intend to have an electromagnetic
16 survey of the urban levees, so this will provide
17 information between the drill holes. Generally, drill
18 holes are spaced about a thousand feet. So this will
19 supplement that and hopefully identify any inconsistencies
20 between drill holes, which we could then follow up with
21 additional drilling.

22 And finally, we are now developing a scope of work
23 for the rural levee evaluations, which would be the next
24 phase of levee evaluation program. We've been using AB
25 142 funds for the urban levee work, and with the upcoming

1 budget, we will have \$30 million to begin the rural levee
2 evaluations. The intention is to have two contracts: one
3 for the Sacramento Valley, and one for the San Joaquin and
4 miscellaneous.

5 PRESIDENT CARTER: Mr. Mayer, with regard to your
6 workshops next week with the rec districts, I assume Board
7 members are welcomed to attend those if they so choose, at
8 the JOC.

9 MR. MAYER: I think you would be welcome.
10 However, I don't believe there's been a public
11 announcement, so you will have to watch the numbers, I
12 believe, of the Board members.

13 That's a question for Scott or Nancy.

14 PRESIDENT CARTER: Okay. Very good. Thanks.

15 MR. MAYER: Moving on to erosion repairs, just
16 very quickly wanted to note that the initial repairs have
17 been completed on 99 of the 104 identified critical sites.
18 The Phase 2 repairs, which involves upper slope work,
19 soils and plantings, is really the major effort for most
20 of this summer. And contracts are underway for that type
21 of effort.

22 Next thing I wanted to touch on was Tisdale
23 Bypass. The Board's had particular interest in this
24 project. It's a very important project. We are still on
25 schedule to perform the work this year. The resource

1 agencies have been assuring us that we will have the
2 permits in hand, in time. And, in fact, we're expecting
3 them by the end of this month.

4 We've been working closely with them through the
5 interagency collaborative process. We have a right of
6 entry for the Thomson property. We've been working
7 closely with Sutter Yard and the district regarding
8 relocation of the drainage ditch. And the intention is
9 that the Division of Engineering will advertise a contract
10 in early June.

11 SECRETARY DOHERTY: Sir? When you advertize that
12 contract, how long does that stay out there before the
13 contract is awarded?

14 MR. MAYER: I don't know the details on this one.
15 Typically, it's on the order of a few weeks to a month,
16 something like that. This one, I think it's a little
17 sooner because quicker than that, I think the intention is
18 to award by early July. It takes time between the close
19 of the contract to receive the bids, review them, and
20 decide on who the successful bidder is.

21 SECRETARY DOHERTY: And in your report, you said
22 that "steps to complete the purchase of the farmland is
23 continuing."

24 Is there something holding it up?

25 MR. MAYER: No, it's just working through details

1 of these land transactions. What we do have, though, is
2 the right of entry at this point. It allows us to go to
3 construction.

4 SECRETARY DOHERTY: So you can go ahead, even
5 though it's not completed, and start dumping?

6 MR. MAYER: That's correct.

7 SECRETARY DOHERTY: Now, would you be following
8 last year's schedule this year for the Tisdale?

9 MR. MAYER: I'm not sure what last year's schedule
10 is.

11 SECRETARY DOHERTY: All right. Thank you.

12 MR. MAYER: Okay.

13 Knight's Landing maintenance area formation. I
14 wanted to update you a little bit on that. Last fall, the
15 Department assured a developer and community and the Board
16 that we would be in a position by this upcoming July to
17 have a maintenance area established. And we had been on
18 track for doing that until a recent development, and the
19 recent development is actually very big news. And that is
20 that Knight's Landing Ridge drainage district has sent us
21 a letter, in late April, saying that they would like to
22 take over maintenance.

23 And they put some conditions on it, that we need
24 to work through with them. One of the conditions being
25 that they want this currently unmaintained area to have

1 its own separate federal unit designation so that their
2 maintenance ratings for the rest of the federal units in
3 the area would not be affected by the lack of maintenance
4 in this area.

5 And of course, that's very important for the
6 Corps' new vegetation policy that seems to be coming
7 forward, which I'm going to be talking about in a minute.
8 That's one of the issues that we need to work through with
9 them. And the Corps has indicated an openness to doing
10 just that. But we need to get that confirmed that the
11 Corps will be able to do that.

12 And also, they asked for a condition that they
13 would be providing indemnification to the Board, but
14 perhaps not quite as strongly as the Board may desire. So
15 we wanted to work through that issue as well.

16 Overall, we consider it a very positive
17 development, which we think is important to pursue and
18 make it happen, if possible to make it happen, which if it
19 turns out it can happen, it would be later than what we
20 originally said with respect to forming the maintenance
21 area.

22 Essentially, it would take us about -- once we
23 decide that we can't do this, if that's what happens, it
24 probably takes about three months to work through the
25 maintenance process. We think this is where we should

1 really focus our efforts at this point and not form the
2 maintenance area if at all possible.

3 And furthermore, the developer has been doing a
4 lot of work clearing vegetation out there on the levees.
5 So actually, maintenance has improved significantly from
6 where it stood a year ago.

7 Okay. I also wanted to talk about the Corps' new
8 vegetation policy. They released a draft final white
9 paper called "Treatment of vegetation with Local Flood
10 Damage Reduction Systems." It was dated April 20th. And
11 I know that the Reclamation Board provided a short comment
12 letter by the deadline for comments of May 11th. And DWR
13 similarly provided a comment letter on May 11th to the
14 Corps, and it was a fairly detailed and lengthy comment
15 letter indicating that we're very concerned about this new
16 policy. It will have the effect, in many cases, of
17 reducing flood protection by diverting limited resources
18 to addressing vegetation issues, that those funds and
19 efforts would be better spent on addressing underseepage
20 and major safety issues.

21 We also pointed out that the need for this is not
22 well documented, and there were not case histories that
23 were presented that provide any compelling evidence of the
24 need for this. We think it will have significant impacts
25 on endangered species, and it will be difficult to work

1 through environmental permitting process and CEQA and
2 NEPA.

3 It doesn't consider that there are oversized
4 levees or that there have been previous approvals by the
5 Corps for vegetation on levees in certain circumstances,
6 as well as in many cases, the levees were completed by the
7 Corps, turning it over to us, with the trees, within the
8 proposed and no vegetation zone.

9 And finally, I wanted to point out that this was
10 coordinated closely with the Department of Fish and Game,
11 and this letter reflects their concerns as well. And
12 further letters are being prepared. I know SAFCA has been
13 working on one. The State continues to work on one. And
14 I know other agencies in the interagency collaborative
15 effort are also working on letters.

16 BOARD MEMBER RIE: Could we get a copy of your
17 letter?

18 MR. MAYER: Certainly. I'd be glad to do that. I
19 can send that to Jay.

20 BOARD MEMBER RIE: Okay.

21 MR. MAYER: Let me make a note.

22 GENERAL MANAGER PUNIA: We have a copy. I will be
23 glad to send it to the Board members.

24 MR. MAYER: Okay. Great.

25 I also wanted to talk about two other topics

1 quickly: One is, the governor's proposed revised budget
2 includes a proposed reversion of remaining AB 142 funds.
3 I'm sure you recall that a year ago, AB 142 authorized 500
4 million for the Department for various purposes, mainly
5 related to critical repairs.

6 And at this point, we spent approximately
7 250 million as of about a month and a half ago. The most
8 recent look at our financing system showed about
9 250 million spent. And we're projecting that early into
10 next fiscal year, we will spend about 320 million or so.

11 So this proposed switchover by the governor would
12 increase general funds savings -- which is very important,
13 because there is a major general fund deficit -- by
14 reverting 168 million out of AB 142 back to the general
15 fund; and switching over to Prop 1E and Prop 84 funds to
16 continue those very same activities. So this is a plan
17 that doesn't affect the work, because it just affects what
18 the funding source is for the work. So the planned work
19 would still continue.

20 In addition to that, 16 million is proposed for
21 diversion from the State Flood Control Subventions
22 Program. There was a hundred million dollar appropriation
23 in the current year. With the staff that we have to put
24 the funds out the door to repay local agencies, the best
25 we're going to be able to do is about 84 million.

1 Therefore, 16 million, really, of that general fund
2 appropriation isn't needed in the current year. With the
3 next year's budget of a hundred million proposed of bond
4 funds, we can continue that seamlessly, no effect on
5 repayment to the local agencies.

6 So the only effect of these proposals will be at
7 the very end of the life of the bond funds. There will be
8 that much money less available at the end of the life of
9 the bonds.

10 Finally, I just wanted to mention there's been
11 some grant programs that we've been developing. And those
12 grant programs include the early implementation projects
13 for the State Federal Flood Control System Modification.
14 This is a \$200 million fund that would provide for no
15 risk-type projects. I know you're all aware of this
16 program. The grant application packages were sent out in
17 early April. And May 1st was the close of the application
18 period. DWR received seven applications, totaling well
19 over \$200 million for proposed modifications and
20 improvements to our state federal system.

21 DWR is now reviewing those grant application
22 packages, screening them against the criteria. And we
23 will get -- be getting back to the applicants, informing
24 them whether they are successful or not successful, about
25 the end of May, very early June, that timeframe.

1 And that would -- for those successful applicants,
2 we would be notifying them of the proposed state cost
3 share, and therefore what the local cost share would be
4 needed, and then asking them to demonstrate that they have
5 financing capability to fund the local share.

6 If they are successful in that, then we will
7 proceed on to grant payments.

8 BOARD MEMBER RIE: Rod, do you anticipate funding
9 all the applications?

10 MR. MAYER: I think I would rather not comment on
11 that since we're still in the screening process.

12 BOARD MEMBER RIE: Okay.

13 MR. MAYER: We also put out draft guidelines for
14 some of our new grant programs as well as a -- I guess a
15 new life for an existing grant program. So we'll talk
16 about that old, existing program first. That's the Flood
17 Protection Corps Program created under Prop 13. We are
18 proposing to use \$25 million in Prop 84 funds to fund that
19 program. It's a statewide program.

20 And the draft guidelines were put out in early
21 April. And the comment period on the draft guidelines was
22 closed on May 11th. We are now reviewing the comments and
23 deciding whether or not we will revise the guidelines to
24 reflect those comments.

25 In addition, there were two other programs which

1 previously have not existed, but we will be creating these
2 programs with Proposition 84 funds. First is the local
3 levee urgent repair programs. This will be a one-time
4 program with \$40 million in funding. We're proposing
5 50/50 cost sharing. And this is really an outgrowth of
6 the governor's executive order of February of 2006, where
7 he directed DWR to repair 24 critical sites, and it wasn't
8 limited to just the Central Valley State Federal System.

9 So this grant program would be the source of
10 funding to fund critical levee repairs, statewide. In
11 fact, none of this could be used on state and federal
12 levees.

13 And then another new program is the Local Levee
14 Evaluations Program, which would fund \$20 million. 10 of
15 it's a one-time, and ten of it would already be -- was
16 already planned. We would be continuing in subsequent
17 years. And this would be to fund levee drilling, much
18 like we're doing on the state and federal levees. There's
19 a great need statewide. There's 14,000 miles of levees in
20 the state. Lots of agencies have the same concerns about
21 their levees that we do here. And this will be a funding
22 source to help them do some drilling and engineering
23 evaluations of those levees.

24 So the guidelines in draft form, we will put out
25 in early April, and the comment period closed on May 11th.

1 We will consider comments and revise guidelines
2 accordingly. If there are significant changes to the
3 draft guidelines, we will probably end up recirculating
4 for a short time, before finalizing them and proceeding
5 through the grant application and screening and award
6 process.

7 Any questions on any of the presentation?

8 PRESIDENT CARTER: Any questions for Mr. Mayer?

9 Thank you very much.

10 MR. MAYER: You're welcome.

11 BOARD MEMBER BURROUGHS: Mr. Mayer, I did have one
12 last questions I wanted to ask about in regards to the --
13 you didn't go over the legislative update. Do you have
14 any comments on SB 17, the Florez bill? Where that's at?

15 MR. MAYER: Well, the Department is monitoring
16 that bill along with all these other bills.

17 We do have comments on the bills although we keep
18 them, in the administration, confidential. We can share
19 comments with the Board. I believe we can do that
20 separately, but it wouldn't be appropriate to do it in a
21 public forum.

22 BOARD MEMBER BURROUGHS: Thank you.

23 MR. MAYER: Sorry.

24 PRESIDENT CARTER: Thanks very much.

25 Okay. At this time we're moving on to Item 7, the

1 Three Rivers Levee Improvement Authority Monthly Report.

2 Mr. Brunner, welcome.

3 MR. BRUNNER: Paul Brunner, the executive director
4 for Three Rivers. And it's good to be here, and good
5 morning to the Board members.

6 You have a copy of our report that we submitted.
7 And I know, last time I talked about really concentrating
8 and making sure that report is complete. My remarks will
9 be very brief, and I just want to hit a couple highlights
10 of points that I want to make during this time, and then
11 just really open it up for questions, if you have
12 questions from our report, for our board to respond to.

13 There is a handout that's being passed to you, by
14 Lorraine right now, which is really a very significant
15 event for Three Rivers. It's our certification letter
16 that we have received from the Corps of Engineers that
17 pertains to the 11 miles of work that we have been
18 discussing with you for, gee, many years now, I think, as
19 we worked through that.

20 So it's -- we have come before you -- I know, I've
21 come before you for many months saying, "We're just about
22 there, we're just about there." Well, we are here. And
23 so it does represent 11 miles. Six miles of the Western
24 Pacific Interceptor Canal, approximately 3 miles on the
25 Bear including setback, and then there's a two-mile area

1 on the Yuba River that we have been talking about at
2 length, that's the site of the 1986 break area, the
3 300-foot seepage berm. The Corps has reviewed our
4 drawings, reviewed our information, our engineering, our
5 construction, and they have certified those levees.

6 So thank you very much for your help. I know
7 within our team, we think that's a very significant
8 milestone for us.

9 PRESIDENT CARTER: Congratulations.

10 MR. BRUNNER: Thank you. We're going to continue
11 on with the rest of the levees that we're doing. And
12 you'll have the pleasure of us being back here, many, many
13 more times and talking about the work we're doing.

14 There is a couple points in the certification
15 letter that, as you read through, I will just point out.
16 It does talk about a new concept that the Corps is
17 including now, I think, in all future certifications that
18 they do. There's a ten-year cycle that they are putting
19 in there. So after ten years, we'll go back, do a
20 recertification. I personally think that's good, that we
21 go back and look, and to check to make sure that they are
22 still okay.

23 I personally think that if something changes -- we
24 just heard one of the exit philosophies -- we'll
25 definitely be looking at that anyway, during that time

1 period. But that is in there, and apparently the Corps is
2 going to be using that as a standard practice from now on,
3 for any levees that they certify.

4 Another thing that I would like to point out in
5 that letter is, we all know that there's two different
6 types of certification -- there's the FEMA approach and
7 there's risk and uncertainty. And the Corps is definitely
8 making a move to use risk and uncertainty. John Hess
9 talked about that at the last Rec Board meeting I was at,
10 with you guys, here.

11 The Corps paused -- and one of the reasons why the
12 letter was delayed coming to us -- to really do a
13 preliminary risk and uncertainty analysis, and they had
14 done that. And the letter, at first, did not address that
15 point. But on the second page of that letter, you will
16 see that it does talk about a preliminary risk and
17 uncertainty analysis they did, and our levees passed that
18 uncertainty analysis, which they wanted to make sure that
19 it was included in our letter to be able to answer that
20 question when it comes forward in certifications in the
21 future, are we okay or not. And so I think that's also
22 very significant for us.

23 The other bullet that's pointed out in that
24 letter, that letter talked about looking at future access,
25 which is a big issue, could be vegetation or what, on

1 levees, is for us to take a look along the Yuba River.
2 There's some residents along there too, to please check it
3 out and work with them and all the various partners that
4 authorize 784, and try to address better access on the
5 Yuba. Has nothing to do with certification, but it talks
6 about a future on it.

7 The -- another positive thing that not in the
8 report that I would like to send to you is to tell you
9 about is, our TRLIA Board did take the steps earlier this
10 week to establish the second capital call we have in the
11 funding agreements. So our capital call was established
12 for May -- for May 29th. It was for \$9.1 million, very
13 similar to what we have talked in the subcommittee about
14 during this time.

15 The landowners and developers have already put the
16 money into their holding escrow, so essentially they have
17 already made the capital call in anticipation of what
18 we're going to be doing in the grant applications and
19 moving forward on the setback work we're doing.

20 There was a comment during public comment here
21 about the alignment. We're concerned about the alignment
22 too. We're working through that. We still believe that
23 the alignment is still best. But I do know that when we
24 left the last subcommittee meeting, we did talk about
25 coming back and having a second discussion, another

1 discussion, specifically about alignment and the other
2 topics during that time too. And I was talking to Jay
3 about the timing for this, and we're targeting that
4 meeting the third or fourth week in June. That should be
5 about the time that we get the information back on the
6 grant applications that we're turning in -- hopefully,
7 it's favorable -- and be in a position to really talk to
8 you about a whole bunch of substantive issues.

9 I know that I've been talking with our engineers
10 and looking at our response. And we do have a response to
11 Mr. Naylor's comments. I don't have the graphics here to
12 talk to you today about it, but we do have a response for
13 those comments that are being made.

14 And then lastly, we have had concern raised, via
15 the subcommittee meetings, about our outreach and working
16 with the landowners that are in the area for our levee
17 work. We've taken that to heart, and we will try to
18 improve that. I know, I personally have been engaging, as
19 some of our TRLIA Board members, to personally engage, to
20 try to make sure we understand and have that interaction
21 with the landowners out there, to try and make sure that
22 we understand the issues and move forward on that.

23 So I think what I'm trying to get across is, we're
24 trying to take those steps to engage. We have not made
25 any offers to anyone on Segment 2, which is the Feather

1 setback levee. We have talked about real estate
2 acquisitions for easements, and working for those, but as
3 far as fee title offers, feeling out the property owners
4 to actually acquire the land for the setback yet, we have
5 not made any official offers to anyone yet. We will soon,
6 but we haven't yet. So if you hear inquiries that we're
7 making offers to people with dollar amounts, we have not
8 done that.

9 And I will stop at that point and just ask if
10 there's any particular questions that you have on our --

11 PRESIDENT CARTER: Yes. On your -- the Corps is
12 not yet in a position to certify this levee reach. That's
13 the one on the Yuba River, Feather River East Bank Levee
14 from Highway 70 to Island Avenue.

15 MR. BRUNNER: Correct.

16 SECRETARY DOHERTY: And it said, "This work will
17 be completed in the next phase of work." But it was
18 scheduled to be completed before this time, was it not?

19 MR. BRUNNER: Well, no, not really. What took
20 place was, we believe that that segment of levee was ready
21 for certification now. And we got into a discussion with
22 the Corps about hydraulics and about erosion on the Yuba
23 River bank. And we concluded that the Corps made a good
24 point about it. And instead of arguing about it, we'll
25 just go back and include that analysis in our design for

1 Segment 3, which we were working through and done.

2 And we believe that it will be certifiable in the
3 future, when we finish that phase of the work. So we
4 thought it was ready to be certified, they made their
5 point, we withdraw that request, and we're taking care of
6 it.

7 SECRETARY DOHERTY: But when you worked on that
8 section of that levee, you thought it was ready for
9 certification. You did what was specified and what they
10 had agreed upon?

11 MR. BRUNNER: The work -- that specific point that
12 they have raised, we had not done work on. We had done
13 hydraulic engineering analysis for erosion control at the
14 river bank. And there is a small seepage berm that we did
15 work on that, on the west side of Highway 70. That was
16 not a question.

17 What was a question was some area of erosion that
18 we had not worked on. We thought that it was fine from an
19 engineering analysis that showed that erosion and the
20 velocities that were flowing would be fine and could be
21 certified. The Corps was not okay with those velocities
22 during the certification process, and had asked us to go
23 back and reexamine that, which we're doing.

24 SECRETARY DOHERTY: So what do you have to do to
25 it now?

1 MR. BRUNNER: Potentially, nothing. We are
2 reexamining our hydraulics. And -- do you want to speak
3 to it?

4 MR. REINHARDT: Ric Reinhardt, Three Rivers
5 program manager.

6 We prepared a technical memo, that we submitted to
7 the Department of Water Resources and the Corps for their
8 review, that is a detailed engineering analysis of this
9 site. Our preliminary conclusion is that it is a problem.

10 One of the issues is, this is called the state
11 cut. It's an area that was channelized by the state of
12 California. I think it was in the '30s or '40s. And so
13 we're asking the Department of Water Resources'
14 concurrence if this is the problem, because it will fit
15 into -- it will fit into the program of repair, whether
16 it's the state's responsibility to fix it, or whether it's
17 something we're willing to take care of in our program.
18 So right now, we're waiting on technical comments.

19 SECRETARY DOHERTY: Thank you, Mr. Reinhardt.

20 MR. BRUNNER: Any other questions?

21 PRESIDENT CARTER: Any other questions for
22 Mr. Brunner?

23 BOARD MEMBER BURROUGHS: On the last paragraph,
24 about right of entry to the procured, could you talk
25 about -- give comments back on that?

1 PRESIDENT CARTER: What are you referring to? Is
2 that the letter from the Corps?

3 BOARD MEMBER BURROUGHS: It's in the letter.

4 PRESIDENT CARTER: From the Corps?

5 BOARD MEMBER BURROUGHS: Yes.

6 PRESIDENT CARTER: Certification letter?

7 MR. BRUNNER: The Corps letter is referencing on
8 the Yuba River, there are some residential areas that abut
9 right up to the levee, and they have asked us to address
10 easements in the area to have access to that toe of the
11 levee. They have asked us to do it in a future context,
12 to work with RD 784, and then acquire that. That was not
13 a condition of certification.

14 BOARD MEMBER RIE: Question: You said earlier
15 that the certification letter was delayed so that the
16 Corps can go back and take a look at the risk and
17 uncertainty. How long did that take?

18 MR. BRUNNER: The -- when they were doing their
19 actual review of our project, they stopped to do the risk
20 and uncertainty during that time period. I don't have a
21 timeframe for where it was. I know Tom Trainer paused
22 during the signing-off of the letter to actually include
23 that analysis, or those comments, in the letter for us.
24 So the exact time of how long that took, I don't know.

25 BOARD MEMBER RIE: It was sometime in the last

1 month that it occurred?

2 MR. BRUNNER: Well, let me ask Ric. Ric, do you
3 have the timeframe as to when they actually did that
4 review?

5 MR. REINHARDT: Ric Reinhardt, Three Rivers
6 program manager.

7 We were not provided with the details of the
8 analysis they were doing. It was raised to our attention
9 that that was something they were concerned about, because
10 the Corps is shifting policies so they wanted to take a
11 look at that. And we don't know the details of how long
12 it took. We never saw the results. All we know is that
13 in the end, the chief of Engineering Division was
14 satisfied with that analysis.

15 BOARD MEMBER RIE: Okay.

16 PRESIDENT CARTER: Any other questions for
17 Mr. Brunner?

18 MR. BRUNNER: Thank you.

19 PRESIDENT CARTER: Thank you very much.

20 VICE PRESIDENT HODGKINS: I'm sorry. I think I do
21 have a question, and it's for the Board as a whole.

22 So Scott, you need to watch me here on
23 Bagley-Keene. But we heard comments during the public
24 comment session about levee alignment. And they were
25 talking about a subcommittee meeting where that would be

1 discussed in June.

2 I want to be sure that if there is the potential
3 for alignment change, that that timing is still such that
4 it wouldn't totally be too late in your process to
5 consider the change.

6 I don't want to get into the meeting discussing
7 alignment where from a practical standpoint, it's too late
8 to do anything about it.

9 So I guess I'm asking if a June meeting meets that
10 need or we should try and do it earlier.

11 MR. BRUNNER: Well, we're already on a very fast
12 track on the project. If we shift the alignment today, we
13 would have impacts scheduled. And my personal opinion is
14 that without analyzing the schedule right now, we would
15 have impacts, and the 2008 timeframe would not be
16 achievable.

17 VICE PRESIDENT HODGKINS: Okay.

18 MR. BRUNNER: So if we ended up making adjustments
19 even today, we would be in the time period of adjustments,
20 looking at time for completion on the project.

21 We still believe that the alignment of where it is
22 today is in the right location on it.

23 So I will leave it at that.

24 But we are open to having that discussion. If we
25 end up doing something different, then we will have an

1 impact schedule.

2 Thank you.

3 PRESIDENT CARTER: Given that, Butch, since you're
4 chair of that subcommittee, does it make sense to try and
5 schedule that meeting earlier?

6 VICE PRESIDENT HODGKINS: I think what I heard is,
7 we'll have people hearing testimony about alignment at the
8 subcommittee meeting. And I don't know what the
9 subcommittee will decide to recommend to the Board, but
10 irrespective, if there is a change, if that occurred
11 today, it would impact the schedule for completing that
12 work. So holding that meeting in June is -- trying to
13 hold it sooner wouldn't really make any difference. It's
14 already too late to make an alignment change without
15 impacting the schedule. Okay?

16 So part of the consideration, if we get into that
17 issue, will be the impacts on the schedule for completing
18 the Feather River setback.

19 PRESIDENT CARTER: We can talk about the specific
20 timing when we talk about future agendas. I think there's
21 some things that are going to happen in the Board meeting
22 that are kind of scheduled that may have a -- an influence
23 on when we want to hold the subcommittee meeting. So
24 we'll talk about that under our future agenda, discussion
25 Item 15 today.

1 VICE PRESIDENT HODGKINS: That's fine.

2 MR. BRUNNER: Thank you.

3 PRESIDENT CARTER: Thank you.

4 We do have a couple of people that want to make
5 comments on this particular item.

6 Mr. McClain?

7 MR. McCLAIN: My name is Kent McClain. I'm
8 retired. I live in Roseville.

9 I read with substantial interest in The Bee
10 recently of certification of 11 miles of levees in the
11 south eastern portion of Yuba County.

12 I think it's important that we all recognize that
13 in less than three years, those problems were identified,
14 the engineering solutions were achieved, funding was
15 developed, and construction completed.

16 To my knowledge, no other agency -- federal,
17 state, or local -- in the state of California, has ever,
18 within that kind of timeframe, achieved such significant
19 and substantial results in terms of improving the public
20 safety and providing a level of flood protection that
21 never existed before, for the people living behind those
22 levees.

23 I want to take this opportunity to express my
24 appreciation to this Board, to the staff, and to members
25 of DWR and other state agencies, as well as previous Board

1 members and previous staff members who were instrumental
2 in the process of, number one, developing a sense of
3 urgency in terms of the project; and number two, a
4 willingness on your part to make timely decisions that
5 are -- were absolutely critical to the success of that
6 construction and certification process.

7 So while I have no personal stake anymore in that,
8 I wanted to tell you that, as mostly laypersons, you are
9 being called upon to make decisions that are very, very
10 difficult to make. And I appreciate and understand that.
11 I thank you very much.

12 PRESIDENT CARTER: Thank you.

13 VICE PRESIDENT HODGKINS: I think that one thing I
14 would like to say that the success of the program to date
15 is, to a large extent, due to the efforts of Kent McClain
16 and his very, very good leadership in helping Yuba County
17 to work with the Board and actually address the issues of
18 the public safety.

19 Kent, you are fantastic. Paul is fantastic as
20 well. You brought traits that were highly needed at the
21 time, and I think you are the person largely who should
22 get the congratulations for that certification. So I
23 express that to you.

24 PRESIDENT CARTER: Mr. Foley?

25 MR. FOLEY: Good morning, Chairman and Board. Tom

1 Foley from Yuba City.

2 I would like to comment on what Mr. McClain said.

3 I got involved in this in '04. I actually started
4 watching it in '03 and started a nonprofit in '04.

5 And as member of the public, I have this to say,
6 that who is primarily responsible for all the work that
7 both people Mr. Hodgkins mentioned and Mr. McClain
8 mentioned, who was primarily responsible about it is the
9 former Rec Board. The former Rec Board. In Scott
10 Shapiro's words, "Held a gun to TRLIA's head." That's
11 what it takes.

12 Now, the Army Corps identified a new deficient
13 levee upstream of Island Road.

14 Three Rivers reported to the Rec Board on
15 January 27, 2006, that there are boils along the Feather
16 River at pump station number 3. Boils are a sign of
17 immediate danger. Three Rivers has a barely credible
18 financing plan, which does not take into account that
19 newly identified deficient levees.

20 The housing market is flat in Plumas Lakes. Now,
21 doesn't all this demand that the Rec Board take steps to
22 take over? 8645, Water Code, says, "To protect life and
23 property, the Rec Board may declare an emergency and order
24 repairs."

25 Is that valid here? Can that be done?

1 If local agencies would do the right thing, the
2 Rec Board would not be needed. The Rec Board is needed
3 especially now, with the bond money. The Rec Board needs
4 to be in close touch with the legislature. DWR is
5 misrepresenting to the Board and to the public that Three
6 Rivers has this or that bond money readily available,
7 practically guaranteed. Someone needs to remind DWR of
8 who appropriates the bond money. DWR does not.

9 I believe there's 200 million per project
10 available that would be available under the 1E for 784.
11 Cannot the Board take the lead and see the levee repair
12 done expeditiously? It's -- all the repairs are, is a
13 contract. And very valuable time will be wasted here
14 while everyone's pretending that Three Rivers is being
15 expeditious on their own account. They are not. The Rec
16 Board must oversee them. That's what gets things done.

17 And I raised an issue once that Mr. Shapiro said
18 135. Mr. Shapiro explained to you, the real number was
19 90.

20 I would like you to ask today Mr. Shapiro what are
21 the new numbers. I think the new number is 40 million, if
22 I'm not mistaken, coming from the developers.

23 So what I'm saying is that the Rec Board is
24 pretending that there are not serious problems here, and
25 there are very serious problems here. The Rec Board knows

1 about the default, the potential default.

2 Under Paterno, when a state agency knows the
3 problems and does not act, that it is inverse
4 competition -- inverse condemnation. That was a wise
5 decision. The Board knows, the state agency knows, now
6 what is going on, and not taking immediate strong action,
7 they are inversely condemning the people behind the
8 levees. The DWR did that before they tried to spend much
9 time trying to not acknowledge liabilities. But that
10 doesn't protect people. Paterno took care of that. No
11 more time should be taken, wasted, on the ability.

12 Along the Feather from -- what is the section?
13 That whole Feather is no good. That's well known. It's
14 just, \$200 million available to the contract to get done.
15 That could be done this year.

16 You are leaving people there unnecessarily, I
17 believe -- I don't know the law perfectly, but
18 unnecessarily leaving people. Every time there's a
19 meeting here, there's a new number from Three Rivers. And
20 then everyone pretends that's not going on. That's
21 inverse condemnation. If the state agency knows that's
22 going on and does not act, that's a very fair thing to
23 say. So I would request that the Rec Board -- and I have
24 been on the scene. I know something about it. I request
25 the Rec Board take very immediate action on this, such as,

1 it's just a contract. It's a contract to repair a levee.

2 The contract has been done very expeditiously,
3 recently in the paper. That's all this is. And I would
4 suggest that the Rec Board consider that if they have --
5 do have -- all these repairs are supposed to be under the
6 emergency declaration, why wouldn't the Rec Board just not
7 get a contract and get it done this year?

8 Thank you.

9 PRESIDENT CARTER: Any questions for Mr. Foley?

10 Thank you very much.

11 Let's take a ten-minute recess. We will reconvene
12 here -- actually, we'll reconvene here at 11 o'clock, so
13 about eight minutes.

14 Thank you.

15 (Thereupon a break was taken in
16 proceedings.)

17 PRESIDENT CARTER: Just a reminder, we are on
18 Item 8, which is Applications.

19 This is Application No. 18170, Three Rivers Levee
20 Improvement Authority, Yuba County, to consider approval
21 of the strengthening of the left bank of the Feather River
22 levee by construction of slurry cutoff walls, stability
23 berms, waterside blankets between levee miles 13.3 to 17.1
24 and 26.6 to 26.1, which, I believe, is commonly referred
25 to as Segments 1 and 3 on Feather river.

1 Mr. Fua?

2 SUPERVISING ENGINEER FUA: Good morning, Board
3 President Carter and Members of the Board. For the
4 record, my name is Dan Fua, supervising engineer of State
5 Reclamation Board.

6 (Thereupon an overhead presentation was
7 presented as follows.)

8 SUPERVISING ENGINEER FUA: I am presenting this
9 morning to you the Three Rivers Levee Improvement
10 Authority's Application No. 18170 for a permit to modify
11 the federal levee within Reclamation District 784 in Yuba
12 County.

13 As you may recall, at our last Board's meeting,
14 the Board drafted staff to send a letter to the U.S. Army
15 Corps of Engineers to request a determination regarding
16 the proposed levee modification under this project.

17 I am happy to report to you that that letter was
18 sent last May 1st. And a copy of that letter is in your
19 packet.

20 I would also like to inform the Board that the
21 Corps' comment letter for this project was received late
22 yesterday afternoon. The staff hasn't adequately reviewed
23 the comments to make sure that the draft permit conditions
24 are consistent with theirs. In addition, the applicant
25 has also not reviewed the Corps' comment letter. They

1 just got it this morning.

2 --o0o--

3 SUPERVISING ENGINEER FUA: Again, the application
4 is to seek an encroachment permit for modifications to the
5 left bank of the Feather River and Yuba River levees.

6 --o0o--

7 SUPERVISING ENGINEER FUA: This is the general
8 location map of the area. The green hash is the
9 Reclamation District 784 area. This is the Yuba River
10 here, up to the north. This is Bear to the south. And
11 this is the Feather River. And this is an east levee of
12 the Feather River.

13 The application is for strengthening and
14 modifications to Segments 1 and 3. The limitations of the
15 Segment 1 starts at the tie-in of the Bear River, new
16 setback levee, up to Star Bend. It's about 3.8 miles,
17 north.

18 Segment 3 actually starts at the south -- or the
19 left bank levee of the Yuba River, starting from the Union
20 Pacific Railroad track, south of Highway 70, up to the
21 tie-in of the east Feather River levee, and continuing to
22 the south, about 2.8 miles. So the project has a combined
23 total of 6.6 miles.

24 Now, for a brief history of the east Feather River
25 levee. It was built by the U.S. Army Corps of Engineers

1 in the early 1900s, but after frequent levees failures, a
2 Corps conducted major reconstruction and repairs between
3 1936 and 1941.

4 Well, since that major reconstruction, the Feather
5 River east levee between Shanghai Bend up to the
6 confluence of the Bear River still experiences seepage
7 problems. So major modifications, reconstruction, and
8 upgrades have been implemented by the Corps over the years
9 in response to the deficiencies identified in high flood
10 waters.

11 Despite improvements implemented by the Corps,
12 seepage problems continue to occur.

13 --o0o--

14 SUPERVISING ENGINEER FUA: This is the generalized
15 map of Segment 1, identifying the locations of the seepage
16 problems and boils that occurred through the years. This
17 is the levee here, and these are the general locations of
18 the seepage problems. And there's also one here.

19 And the most recent seepage problem occurrence was
20 observed during the high water events in January of 2006.
21 Seepage problems -- seepage and boils were seen near the
22 vicinity of pump station number 2. Similar problems,
23 seepage problems and boils, were also observed in Segment
24 2, which is not part of this application.

25 The proposed strengthening project for Segments 1

1 and 3 is a result of several engineering studies conducted
2 by Three Rivers, beginning with a report on the
3 feasibility of the Yuba-Feather supplemental flood control
4 project, which was completed in 2003. A feasibility study
5 reported potential flood control elements including a
6 setback levee and the east Feather River levee between
7 Yuba River and the Bear.

8 Subsequent to that feasibility report, several
9 detailed engineering studies were conducted by the agency,
10 including the February 2006 problem identification report
11 for Phase 4 of the Feather and Yuba River left bank
12 levees.

13 Additional studies and analysis were conducted
14 after that, culminating in the March 2007 design report,
15 which identifies the strengthening measures and
16 modifications that are proposed, and there's an
17 application.

18 --o0o--

19 SUPERVISING ENGINEER FUA: These are the analyses
20 that they conducted to support the design of the
21 strengthening measures.

22 Hydrology and hydraulics modeling, they conducted
23 that to determine the elevation -- the elevation of the
24 existing levee and compared it to the water surface
25 elevation to the 200-year flood event and the 100-year

1 flood event.

2 Embankment erosion protection investigation, they
3 conducted that. Levee geometry evaluation to ensure that
4 the slopes, the crowns, and the other parts of the levees
5 are in conformance with Board and Corps standards.

6 They conducted underseepage and throughseepage
7 analysis. Again, underseepage analysis, they used the
8 Corps criteria of 4.0 -- 0.5 exit gradient.
9 Throughseepage analysis was done through the geotechnical
10 information that we had gathered and also the areas that
11 were identified by the Corps in 2006. We also conducted
12 embankment and foundation stability analysis and
13 foundation stability analysis.

14 --o0o--

15 SUPERVISING ENGINEER FUA: The proposed design
16 standards were based on the following: The levee design
17 and construction in Title 23, the Reclamation Board; U.S.
18 Army Corps of Engineers, the engineering manuals and the
19 technical letters; and of course the FEMA standards. They
20 incorporated the FEMA standards because one of the goals
21 of this project is to get certification from FEMA.

22 --o0o--

23 SUPERVISING ENGINEER FUA: Okay. Here, the next,
24 following two slides with the proposed strengthening
25 measures. This is Segment 1. Again, it starts from the

1 confluence of the Bear River up to Star Bend. The first
2 one is a waterside cutoff wall. That is about 2,700 feet;
3 the next one is about 2,175 of another cutoff wall; the
4 third one is a water blanket for about 1,700 feet; another
5 cutoff wall for about 3,100; waterside blanket, about
6 2,600 feet; and relief wells.

7 Most of these strengthening measures were based on
8 the underseepage analysis and throughseepage analysis.
9 The waterside cutoff wall, and as I've said, this -- the
10 criteria that they use is the criteria by the Corps, which
11 is 0.5. And then they check. And then they tried -- in
12 designing these measures, they -- the goal was to reduce
13 the exit gradient to less than .5. So I believe we came
14 up with between .3 and .5 in most of these measures.

15 --o0o--

16 SUPERVISING ENGINEER FUA: Segment 3
17 modifications:

18 First one is the crown reshaping in the Yuba River
19 left bank levee. It's about 400 feet. And that is to
20 bring the height of the levee to the 1957 profile and also
21 to achieve a 3-foot freeboard for the 200-year flood
22 event;

23 Second one is slope flattening, about 3,100 feet,
24 and that is to meet the three-to-one standard for the
25 waterside slope;

1 And then about 2,700 feet of stability berm;

2 A cutoff wall of about 6,200 feet;

3 And again, a crown reshaping to bring the levee
4 height to the '57 profile, and to achieve a 3-foot
5 freeboard for the 200-year flood event.

6 --o0o--

7 SUPERVISING ENGINEER FUA: The proposed
8 modifications and improvements for Segments 1 and 3 do not
9 involve levee raise or levee relocation and realignment.
10 So therefore, there are no hydraulic impacts of that.

11 The levee strengthening. The additional seepage
12 that flows into the Feather River, as a result of the
13 strengthening measures, is about 2 cubic feet per second,
14 which is very insignificant, considering that the design
15 channel capacity of the river is about 300,000 cubic feet
16 per second.

17 --o0o--

18 SUPERVISING ENGINEER FUA: Environmental
19 compliance. Three Rivers had certified -- prepared and
20 certified a final environmental impact report in February
21 2007. Our environmental staff had reviewed the impacts
22 and mitigation measures in relation to our flood control
23 interests. And staff -- our staff has determined that the
24 mitigation measures that are proposed in that EIR reduced
25 the level of impact to insignificant levels.

1 The application is also reviewed by the Board's
2 Environmental Review Committee, and they created the
3 project to be in compliance with CEQA. They approved the
4 application.

5 The State permits. The applicant is working with
6 Department of Fish and Game to obtain a stringent
7 alteration agreement, and the Regional Water Quality
8 Control Board for stormwater and erosion permit, which is
9 this permit. No environmental federal permit is required
10 for this project.

11 --o0o--

12 SUPERVISING ENGINEER FUA: So in conclusion, I am
13 making the following recommendations to the Board: I
14 request that the Board make findings that the
15 environmental impacts of this project is within the
16 jurisdiction of the Board be mitigated or avoided as a
17 result of changes, alterations, and mitigation measures
18 incorporated into the project.

19 Mitigation measures set forth in Three Rivers' EIR
20 relating to flood control and published safety are hereby
21 adopted, and Three Rivers Mitigation Monitoring Plan is
22 incorporated by reference.

23 Third, based on the evidence presented to the
24 Board, the project will not result in hydraulic impacts
25 that will have a significant effect on the environment.

1 I also request that the Board approve the draft
2 permit, the revised draft permit, that is given to you
3 this morning, number 18170 for the project, subject to any
4 changes that may be required by the Board's comment
5 letter.

6 As you will recall, we just received a comment
7 letter late yesterday afternoon, and staff did not have
8 time to thoroughly review it and make sure that they are
9 consistent with our conditions.

10 Finally, I request that the Board delegate the
11 authority to the general manager to finalize the permit,
12 subject to conditions as required in the comment letter
13 from the Corps of Engineers, and issue the permit,
14 provided that the general manager shall not approve a
15 final permit if the chief engineer for the Board
16 determines that any changes to the design permit is
17 required by the comment letter are substantive in nature.

18 That concludes my presentation. And I would be
19 happy to answer any questions. And I would also like to
20 let you know that James Sander of the U.S. Army Corps of
21 Engineers is here to answer any questions that you may
22 have.

23 BOARD MEMBER BURROUGHS: Mr. President, I have two
24 questions.

25 PRESIDENT CARTER: Please, go ahead.

1 BOARD MEMBER BURROUGHS: One question would be --
2 both questions are for legal counsel.

3 Earlier today, we heard about the .05 [sic]
4 standard being changed, and I would like staff as well as
5 legal counsel to give comments on that.

6 And secondly, with the statement that the Corps
7 letter just got in yesterday and the staff has not had
8 time to review that, I would like comments from both staff
9 and legal counsel.

10 LEGAL COUNSEL MORGAN: Scott Morgan.

11 I think the .5 versus .4 -- I don't know what the
12 term is for that, but I think that's a proposed standard;
13 that's not an actual standard.

14 SUPERVISING ENGINEER FUA: .4 is the proposed
15 standard; .5 is the existing standard.

16 PRESIDENT CARTER: Exit gradient.

17 LEGAL COUNSEL MORGAN: Exit gradient. There we
18 go.

19 And I would say, that's just the proposed standard
20 at this point so we have -- you know, it would be
21 something to aspire to, but not required at this point. I
22 will let the staff talk about technical aspects of the
23 exit gradient and those issues. With regard to the Corps'
24 comment letter, as Mr. Fua requested, the staff can give
25 them a chance to review that. And what staff is

1 requesting is, the permit be approved by the general
2 manager subject to the conditions that the Corps letter,
3 and provided that the chief engineer for the Board
4 determine that none of the comments from the comment
5 letter are significant changes to the project, to the --
6 exactly how did you word it?

7 SUPERVISING ENGINEER FUA: Yes.

8 LEGAL COUNSEL MORGAN: Okay. I will let staff
9 talk about it.

10 SUPERVISING ENGINEER FUA: The exit gradient
11 standard is .5. The proposed standard is .4. The design
12 for the strengthening measures was based on the .5
13 criteria. However, as I recall, the measures that they
14 are implementing actually range from .3 and .5. So I
15 believe that -- I will definitely, you know, review it and
16 make sure that -- you know, which specific strengthening
17 measures achieve .3 or .4, but the range is between .3 and
18 .5. And the consultant for Three Rivers can add to that
19 if you want.

20 MR. REINHARDT: Ric Reinhardt, Three Rivers
21 program manager.

22 I just talked to John Hess this morning about this
23 specific issue. John is the geotechnical branch chief for
24 the Corps of Engineers.

25 I think that it's not completely accurate to say

1 that there is a proposed change in the exit gradient.
2 There is -- Corps of Engineers staff is studying this.
3 There is nothing that's been released; there's no draft
4 out for people to consider.

5 The concern that I have in the proposal, if it
6 comes forth, or when it comes forth, is what's changed in
7 2004 when the Corps of Engineers adopted the current
8 underseepage standards that we are using for
9 implementation of not just Three Rivers project but the
10 Corps of Engineers Project and Common Features. And it's
11 currently what SAFCA is using for its projects in West
12 Sacramento as well.

13 And the change in criteria is for the hundred-year
14 water surface elevation. It's a little more complicated.
15 It isn't .4 for the 200-year. There's a number of other
16 factor of safety adjustments that may or may not result in
17 a change in exit gradient for the 200-year water surface.

18 So what I would encourage this Board to do is ask
19 the Corps of Engineers to come forward and ask how --
20 what's being considered and how it might affect these
21 projects.

22 Once the slurry wall's in place, we don't believe
23 changing the criteria or what's being considered is going
24 to have a significant impact on the viability of the
25 constructed works. What we believe the greatest

1 implication would be in increasing the scope of the
2 project, there are reaches of levee that might right now
3 have a .45 or a .43, where additional work would be
4 required. And so if the criteria change, the scope would
5 need to be expanded.

6 Now, the timing of the Corps process is several
7 years. This isn't something that, as I understand, is
8 going to happen in the next couple months. The technical
9 elements will present a proposal to headquarters, and then
10 headquarters will do a technical and policy review of that
11 proposal. And I think, as we've experienced from other
12 efforts, that's a very lengthy process. It's important
13 for us to know what's going to happen because we do want
14 to make the changes to the project, if we know it's
15 coming. But right now, it's not as simple as saying, "Go
16 ahead and design your project to a .4."

17 BOARD MEMBER BURROUGHS: Appreciate your comments.
18 Thank you.

19 PRESIDENT CARTER: Steve?

20 CHIEF ENGINEER BRADLEY: Yes, I think I would like
21 to comment on that. Ric is right; this is a
22 recommendation by the Independent Consulting Board,
23 "independent" being the key word there, "independent" of
24 the Corps. They are making recommendations to the Corps.
25 The Corps has not adopted this. There's internal

1 discussions. My understanding is, they are going on
2 specifically between the Sacramento district and
3 headquarters on this. Nothing has been resolved; it is
4 not a Corps criteria yet; it is just a recommendation by
5 the Independent Consulting Board that it should be changed
6 from .5. They have been talking about .4, but they have
7 also been talking about .3. So it's in flux at the
8 moment.

9 PRESIDENT CARTER: Thank you.

10 Mr. Punia?

11 GENERAL MANAGER PUNIA: I just want to make this
12 comment too. The Corps letter, which we received
13 yesterday afternoon, we haven't had the chance to digest
14 the detailed comments, but I want to read the first line.

15 "The district engineer has no objection to a
16 conditional approval of the application by the Board from
17 the flood control standpoint, subject to the following
18 conditions."

19 Thank you.

20 PRESIDENT CARTER: Okay.

21 BOARD MEMBER BURROUGHS: Is there a reason why we
22 don't have a copy of that letter?

23 GENERAL MANAGER PUNIA: It's --

24 SUPERVISING ENGINEER FUA: You have a copy of
25 that, Rose Marie, in your packet -- in your binder.

1 STAFF ASSISTANT PENDLEBURY: The one they received
2 this morning?

3 GENERAL MANAGER PUNIA: This morning, yes. I
4 think it's in the packet.

5 STAFF ASSISTANT PENDLEBURY: It's in the binder.

6 SUPERVISING ENGINEER FUA: Item 8.

7 BOARD MEMBER BURROUGHS: Thank you.

8 PRESIDENT CARTER: Our addendum to the packet.

9 Very good.

10 Any other questions for Mr. Fua?

11 Okay.

12 SECRETARY DOHERTY: I do have one question, if I
13 may.

14 PRESIDENT CARTER: Go ahead.

15 SECRETARY DOHERTY: There's a paragraph in there,
16 Page 2, almost down near the bottom. "The U.S. Army Corps
17 of Engineers may consider these improvements modifications
18 to the existing federal flood control project and
19 therefore may subject the applicant to a federal review
20 and approval process prior to authorizing the work."

21 Would you explain that to me? Are they going to
22 have to go for more review?

23 SUPERVISING ENGINEER FUA: I apologize for that.
24 Actually, that was old -- that was the old version of my
25 staff report for last month. So by now, we really meant

1 the letter that was sent last May 1st.

2 PRESIDENT CARTER: Go ahead, Mr. Punia.

3 GENERAL MANAGER PUNIA: I wanted to clarify, there
4 is -- at this time we are seeking two types of comments or
5 approvals from the Corps: One is the comments on our
6 encroachment application; second, as Mr. Dan Fua
7 mentioned, that we have sent a letter to the Corps asking
8 their approval to modify the project. So the TRLIA cannot
9 start construction until we get the approval from the U.S.
10 Army Corps of Engineers in response to our letter, making
11 that determination that whether that approval be under 408
12 or some other authority, but it's -- our permit is subject
13 to that approval also.

14 PRESIDENT CARTER: Okay. Very good. Any other
15 questions or comments?

16 SECRETARY DOHERTY: It's not for Mr. Fua, but
17 perhaps for Kent or for Paul. But under the revised
18 application, there are a great many requirements for the
19 permittee.

20 Now, we weren't here when TRLIA was established,
21 so it keeps saying "The permittee will be responsible,
22 will be responsible, will be responsible for all of these
23 things."

24 Now, is TRLIA going to exist forever, in
25 perpetuity?

1 MR. BRUNNER: The plan for TRLIA was not for us to
2 exist forever. The plan for TRLIA was to accomplish the
3 levee completion and build the levees in the South Yuba
4 basin, potentially have life beyond if there was another
5 purpose for us. But the goal was for us to go away.

6 But there's also the goal that we would transition
7 our responsibilities with the Rec Board and RD 784 and the
8 county -- most likely to RD 784 if we actually do go away.
9 So there would be a transition period that would take
10 place.

11 SECRETARY DOHERTY: So there would also be
12 somebody responsible?

13 MR. BRUNNER: Yes.

14 SECRETARY DOHERTY: Thank you.

15 MR. BRUNNER: I do have some comments as an
16 applicant [sic], the person that applied for the permit,
17 that I would like to address.

18 PRESIDENT CARTER: That would be an applicant.

19 MR. BRUNNER: Applicant. There we go.

20 I'm going to ask Scott Shapiro to come forward
21 here in a second. But there's a couple conditions, most
22 notably Special Condition 14 on it, that I would draw your
23 attention to. It deals with land side easement requests.
24 And also there's a flow -- flowage easement requirement
25 that is addressed in that requirement.

1 The 50-foot toe of the levee or other flood
2 control structures comes up in other conditions, but I
3 think condition 14 is the one that is really the beginning
4 of the discussion.

5 That additional easement requirement is -- we
6 consider additional -- we do not yet agree with that
7 condition. There is significant dollars and costs that
8 come with that, that we had not planned for or
9 anticipated. And there is a discussion that's going on
10 with staff about that item. I think the permit could
11 still be delegated and we work through that. But if it
12 remains the way it is there, then we have actually a
13 serious condition of whether or not we actually live with
14 that condition and financial support to do that.

15 So with that, I'm going to ask Scott to address it
16 in more specifics.

17 MR. SHAPIRO: Good morning. Scott Shapiro,
18 special counsel for Three Rivers.

19 As Paul said, we're very appreciative of the
20 staff's recommendation of the permit we delegate to the
21 general manager for issuance. We're pleased, as always,
22 to get permission to do the flood control project that we
23 all want us to do. However, we do have some concerns with
24 some of the conditions. There's actually Conditions 14,
25 37, 48, 50, 51, 66, and 75, although they are all based on

1 the exact same issue. So I will limit my comments
2 primarily to Condition 14.

3 Let me just go through Condition 14 for a moment,
4 and then I can explain what our concern is. The relevant
5 part states, "Shall provide the Sacramento and San Joaquin
6 Drainage District and combine through the Reclamation
7 Board of the State of California a permanent easement
8 granting all flood control rights upon, over, and across
9 the property to be occupied by the existing or to-be
10 reconstructed levee."

11 And then in terms of the scope, it says, "The
12 easement must include the area within the floodway, the
13 levee section, the area 50 feet in width adjacent to the
14 landward levee toe and landward toe of the seepage berms."

15 When we reviewed this, one of the first things we
16 did was to get in touch with Department of Water Resources
17 to find out what current easement language DWR is
18 requiring to be used for flowage easements, basically a
19 permit easement granting flood control rights.

20 That easement from DWR allows the state at any
21 time to do four things:

22 One is, flow and impound waters and materials and
23 by said flow erode, place or deposit earth, debris,
24 sediment, or other materials.

25 No. 2, excavate and remove earth, debris,

1 sediment, or other material placed or deposited as above.

2 Three, and this is key, clear and remove any and
3 all obstructions and improvements which may interfere with
4 any of the uses listed herein or any use necessary or
5 incidental thereto -- so basically, on your whim, the
6 state can come in and say, "We need to remove this because
7 it's in the way of inspections or anything else."

8 And restrict any use by others which may interfere
9 with the flood control purpose of the project.

10 So it's a pretty significant easement, and we
11 consulted with our appraisers. And our appraisers have
12 said that, in essence, it's about a hundred percent value.
13 What that means is, if you can imagine, you have a piece
14 of property and somebody needs an easement to drive across
15 it, it may increase the value of your property a little
16 bit but not significantly. Here, because the state can
17 come in at any time and remove everything that's there,
18 it's a hundred percent value, in essence.

19 What I did was, I took a look through the Water
20 Code yesterday. It's always refreshing to read the Water
21 Code, reread your regulations. I went through the Corps
22 standard O&M manual for the Corps. I went through the
23 specific O&M supplement that the Corps issued for RD 784
24 and RD 817. And I can't find any basis for the 50-foot
25 number. Your regulations, and in particular, in Section

1 16 of your regulations, do allow you to impose conditions
2 that are reasonable.

3 We question whether this is reasonable. Your
4 regulations themselves in Section 6 provides you a
5 jurisdiction over activities within 10 feet. And we all
6 know that 10 feet has been the standard in the Sacramento
7 River Flood Control Project for many years. So 10 feet
8 seems reasonable.

9 It's interesting that the item next on the agenda
10 is the Corps' Vegetation and Encroachment Policy, which is
11 proposed and not yet adopted, and it only goes to 15 feet.
12 So the Corps hasn't yet gone to 10 to 15. Yet, your
13 recommendation is to go to 50.

14 Now, our concerns are primarily financial,
15 although there's socioeconomic impacts as well. We did a
16 preliminary estimate, the we came up with two numbers that
17 add up to about 16 million dollars in cost. 12.5 million
18 of that is on the water side. You will recall the
19 easement language references all the areas within the
20 floodway. And we've taken a look, and there's about a
21 thousand acres of cultivated agriculture within the
22 floodway and adjacent to Segment 3. I'm not sure what the
23 crop currently is.

24 Those lands, according to the most recent sale,
25 are going about \$12,500 an acre. So a thousand acres

1 roughly -- these are only rough numbers. We only did this
2 calculation yesterday -- generates about \$12.5 million
3 there. And then on the land toe, we've gone through and
4 tried to estimate the cost there. And we have come up
5 with about three and a half million dollars on the
6 landside toe.

7 So even if you ignore the water side issues for a
8 moment, the Board says, we're okay with that. It's still
9 three and a half million, which is about 20 percent
10 increase for our project, which is a pretty substantial
11 increase.

12 I want to go through the -- how we come came up
13 with those numbers, just so you have some basis for it.
14 We looked and found 60-plus residential properties north
15 of Island Avenue on the land side. This is in Segment 3.
16 Yesterday, the cost there was about \$2 million.

17 I have some pictures that I can show you. I
18 didn't bring a lot, but at least to give you some sense.
19 Here's a new house. You can see here is a new house that
20 was just constructed, new construction. It's within
21 50 feet. So that house would have to come out.

22 We actually have five houses that would be
23 displaced. We estimate about \$250,000 in displacement
24 costs. We count ten out-buildings which would need to be
25 relocated. It's about a hundred thousand dollars.

1 Easements will be required on ten rural residential and
2 special use properties estimated cost is \$210,000.

3 Here is the water treatment plant. And it has
4 facilities within 50 feet of the land side toe. We
5 estimate costs there at \$250,000. We have calculated a
6 hundred elderberry bushes that are on Caltrans property.
7 And because we would be responsible for putting the
8 easement over it, they would have to come out and estimate
9 the mitigation costs there at \$250,000.

10 There's also a Plumas Mutual water pipeline, which
11 would need to be relocated. Another 250,000.

12 And then down in Segment 1, which is primarily
13 agricultural, we have taken a look and determined that it
14 totals about 25 acres of land that we would have to build
15 this easement on, at an estimate of \$18,500 per acre.
16 Accurate or not, that's what we're using today. And
17 that's \$462,500. And then about a hundred or so acres of
18 walnuts and we estimate the damages there are \$250,000.

19 So again, it's about 3.5 landside and 12.5 million
20 waterside. And there's no question in mind of the houses
21 and other permanent structures would have to go to eminent
22 domain, although the condition only requires that we
23 achieve it within three years.

24 So our request would be that you do delegate to
25 the general manager authority to issue this permit but

1 provide guidance to staff on what is a reasonable
2 condition. It seems that this is really a policy issue,
3 and the Board needs to decide whether, through this
4 permit, it's adopting a new policy to move from 10 to 50.

5 In the interest of disclosure, staff did provide a
6 SAFCA permit which we issued two months ago, I think. And
7 the SAFCA permit did have the 50-foot condition.
8 Although, my understanding of it, there was already a
9 hundred-foot easement in place. And that's not something
10 I'm positive of; that's my understanding.

11 And the staff has also provided some draft
12 guidelines from the Sacramento River Forum Group, and it
13 has recommended 50 feet. But it's a draft and they have
14 no authority over any of these issues.

15 So this wouldn't be the first time you hear the
16 financial implications. And I just question whether this
17 is really reasonable in light of your condition.

18 So our request would be that you provide guidance
19 on what would be reasonable and how many feet you would
20 like to see.

21 Thank you.

22 SECRETARY DOHERTY: Scott, the idea was that
23 eventually District 784 would be in charge of this. And
24 yet at this time, that house that was just completed, they
25 are allowing people to build right up to the levee?

1 MR. SHAPIRO: Well, it is outside of the 10-foot.
2 It is outside of the current 10-foot jurisdiction. And I
3 don't represent 784, so I can't speak to --

4 SECRETARY DOHERTY: I'm just curious if we are
5 going to be turning this over to them when it's finished
6 and they are already allowing encroachments.

7 MR. SHAPIRO: It's outside the 10-foot and the
8 issue there would be -- arguably, if you think that even
9 though it's outside the 10-foot, it would impact the flood
10 control system, then the -- then whoever built the house
11 should be applying to 784 and the Rec Board and it
12 requires an application to you as well.

13 So this has potential implications that go pretty
14 far. I just remembered, it's worth also noting, that not
15 only is there this requirement that we acquire the
16 easement in all of these other conditions that I
17 mentioned, 37, 48, 50, 51, 66, that same 50-foot number is
18 there in regards to limited activities we can perform.
19 And we question whether it makes sense to have those go
20 out that far as well.

21 And finally, Condition 75, states that, "Any
22 additional encroachments in the floodway or in the levee
23 section within 50 feet of the landward levee toe require
24 an approved permit from the Rec Board." And that seems to
25 be expanding your regulations from the 10 feet that

1 currently states the jurisdiction to 50 feet.

2 I'm not sure how that would be enforced. And I'm
3 not sure how Three Rivers would enforce it. And you are
4 saying, anyone out there who does this within 50 feet
5 needs to get a permit from you. And I'm not sure how
6 Three Rivers would be in a position to make sure that
7 happens. So it's similar to the question about why it's
8 out to 50 feet.

9 Thank you.

10 BOARD MEMBER RIE: Mr. Shapiro, I was wondering if
11 you could tell us what the Corps' current standard is. I
12 know they have that proposal to increase that to 15, or
13 maybe since we have a couple of gentlemen here from the
14 Corps, they could comment on what the current standard is.

15 MR. SHAPIRO: I would much rather ask them to
16 comment rather than me to characterize what their standard
17 is.

18 MR. SANDNER: Jim Sandner, chief of operations,
19 Sacramento District of the U.S. Army Corps of Engineers.

20 Our current standard for local flood protection
21 project for easements on the landside toe of the levee is
22 10 feet. The Corps of Engineers is currently considering
23 expanding that to 15 feet.

24 BOARD MEMBER RIE: Thank you.

25 MR. SHAPIRO: Paul reminded me that the way that

1 Condition 14 is worded also draws into question whether we
2 would be able to get the permit for Segment 2 prior to
3 acquiring all these easements. It says, "Prior to
4 implementing any future flood control work improvement
5 work along the left bank of the Feather River," we have to
6 demonstrate that these easements have been provided. And
7 while it hasn't been agendized yet, we hope to receive a
8 permit from this Board in July on Segment 2.

9 So this permit condition would conflict with that
10 timing as well.

11 PRESIDENT CARTER: Any other questions for the
12 applicant? Okay.

13 We have a couple folks from the audience that
14 would like to talk.

15 Mr. Foley?

16 MR. FOLEY: Thank you, Mr. Chairman, again, and
17 the Board. I would like to -- I guess it's a rhetorical
18 question, but Ric Reinhardt asked what happened in 2004.
19 Katrina happened. Two thousand people died. Four hundred
20 million paid out by the public. Paterno happened. That's
21 what happened since 2004. That is why we are talking
22 about tougher standards, better exit gradient standards,
23 better physical standards. Two thousand people died.
24 Four hundred million paid out by the public.

25 About this issue, the Rec Board is completely

1 involved in the Three Rivers Levee Improvement Program.
2 They are intimately involved, since the former Rec Board
3 held the permit. They are involved in the financing of it
4 or the permits were not issued without some sort of --
5 it's a financing issue. I do not think the Rec Board can
6 issue this permit in the absence of some financing. You
7 can not -- it's what I said earlier. What is it? They
8 have no viable plan. And if the Rec Board knows that, the
9 state agencies know that, the DWR knows that, and their
10 engineers report boils along that whole section. Boils
11 are a danger. 2006 was not a very high water. Boil are a
12 sign of immediate danger.

13 And if the state agencies know -- you have to ask
14 Mr. Shapiro, today, what is latest number because you
15 cannot build a levee without dollars. What is the latest
16 number of developer dollars?

17 We heard 90 this last time, but I've heard talk of
18 local share, which is more like 40. But to proceed under
19 false assumptions is dangerous. And the Rec Board is very
20 much involved in this. The Rec Board cannot be innocent.
21 The Rec Board has to -- you cannot -- how can you proceed
22 in this day forward without answers from TRLIA, how much
23 money is coming from developers? That number changes all
24 the time.

25 And I will tell you any number he gives you now,

1 you will probably have a different number so you are
2 proceeding -- you are pretending that there is no problems
3 here with the financing. And there are very serious
4 problems with the financing.

5 And then we have these issues about 50 feet don't
6 need -- don't -- the public pays that \$400 million,
7 reasonably expect a different standard? The standard is
8 not to save the developers money. The standard is to save
9 lives. 2,000 lives lost in New Orleans over lax
10 standards. That's why we're seeing new standards.

11 The Rec Board has serious responsibilities that
12 cannot be ignored. It is inverse condemnation to be
13 aware -- and that's what DWR got caught on. They tried to
14 fight it. They were aware of it. And they did not
15 have -- an action by state agencies is inverse
16 condemnation. That's Paterno.

17 And I've been involved with this. I think you
18 have enough evidence for it in front of you that some
19 immediate action has to be taken.

20 Thank you.

21 PRESIDENT CARTER: Thank you. Mr. Eres, do you
22 want to address the Board?

23 MR. ERES: Good morning, Mr. President, Members of
24 the Board. Tom Eres representing the Hofman Ranch.

25 I wanted to address a couple of points here. One,

1 I'm a little bit concerned that when we get into the
2 detailed discussion on condition No. 14, which the public
3 has not had an opportunity to look at, at least in terms
4 of the documents I pulled out from the Web -- the
5 attachments are not included. I would presume that staff
6 would -- Condition 14 is in there for a very good reason.
7 We haven't yet heard from staff, if you will, in
8 defense -- if "defense" is the right word -- for that
9 condition.

10 I'm also concerned that we're sort of piecemealing
11 this thing. We're talking about Segments 1 and 3, segment
12 2 coming up potentially in July. And we're still have a
13 disintegration between the connectivity of the Corps of
14 Engineers and what they are considering and what you are
15 all considering on the Reclamation Board.

16 I've made this pitch to you before. Wouldn't it
17 be nice if we were all hand and glove here in dealing with
18 the project as it moved through the process. It is maybe
19 efficient to have a delegation to the staff to go ahead
20 and review Corps comments and then make a staff
21 determination.

22 There's something that is as critical as this
23 project, as is critical with respect to the integration to
24 have Phases 1, 2, and 3 to the project, it would seem to
25 be more reasonable and prudent that they be looked at

1 together.

2 I would point out, I am concerned, and you heard
3 me speak many times, that as these levee improvements are
4 being made, little attention is being made to the internal
5 impacts on the drainage.

6 I was surprised this morning get a copy of the
7 certification letter from the Corps of Engineers. And it
8 identifies, in the last sentence on the first page, "Work
9 to the other criteria for certification including interior
10 drainage as identified at 44 Code of Federal Regulations;
11 65.10 were not considered by the Corps but shall be
12 addressed by Three Rivers."

13 I don't know what that means. One of the biggest
14 issues we have is what's going on, on the landside of the
15 levee. And it appears to me that Condition 14 is
16 addressing that very point.

17 Again, it seems to me that this matter is not
18 appropriate for a decision today. I would recommend that
19 it be continued until such time as it -- until the public
20 can have a sense of what are those Corps comments, how do
21 they relate to Condition 14, and how does this entire
22 improvement of the slurry walls and seepage berms, which,
23 President Carter, I think you aptly described as a moving
24 target. We ought to be looking in the future; not
25 standing on old standards because we think we can get them

1 through on a project. I don't think post-Katrina and
2 Paterno allows us that luxury anymore.

3 So again, my suggestion is you might want to take
4 a deep breath on this one and continue it until such time
5 you can get Segments 1, 2, and 3 integrated with the Corps
6 of Engineers, and you have the benefit of the staff's
7 rationale, if you will, for Condition 14.

8 Thank you very much.

9 PRESIDENT CARTER: Thank you. Mr. Fua, maybe --
10 could you shed some light on why staff is recommending to
11 go ahead with Condition 14, why the 50-foot appears in
12 this particular application?

13 SUPERVISING ENGINEER FUA: Essentially, the reason
14 for that is, for flood fighting purposes. The east levee
15 of the Feather River has a history of repeated failures,
16 so that's why staff thinks that there is a need for a
17 wider setback requirement, because of the potential flood
18 problems in the area.

19 As Scott Shapiro mentioned earlier, this 50-foot
20 setback was required for the SAFCA's Natomas project. So
21 this is nothing new.

22 And secondly, the Sacramento River Corridor
23 Planning Forum draft guidelines requested -- recommended a
24 50-foot setback from the toe -- from the landward toe of
25 the levee. And staff thinks that because, you know, this

1 area is mostly rural, that the 50-foot setback requirement
2 should not be a huge problem for Three Rivers.

3 PRESIDENT CARTER: All right. Any other questions
4 for staff?

5 VICE PRESIDENT HODGKINS: Can I ask the property
6 in the floodway, which is between the existing levee and
7 the channel of the river, is that not encumbered currently
8 by a flood easement?

9 SUPERVISING ENGINEER FUA: I don't know, but if
10 it's in the floodway, it should be.

11 CHIEF ENGINEER BRADLEY: I don't know. But it's
12 required by the Board's regulations to obtain that when
13 you do levee work. It's under your levee regulations.

14 Do you want me to read the section?

15 VICE PRESIDENT HODGKINS: Well, just help me
16 understand, Steve, the Corps' regulations require you to
17 acquire what?

18 CHIEF ENGINEER BRADLEY: I'm talking about our
19 regulations.

20 VICE PRESIDENT HODGKINS: Okay. Our regulations
21 require.

22 CHIEF ENGINEER BRADLEY: "The applicant shall
23 provide the Board with a permanent easement granting the
24 Sacramento and San Joaquin Drainage District all flood
25 control rights upon, over, and across the property to be

1 occupied by the proposed flood control works. The
2 easement must include the area within the proposed
3 floodway, the levee section, and the area 10 feet in width
4 adjacent to the landward levee toe area is not presently
5 encumbered by a Board easement."

6 VICE PRESIDENT HODGKINS: Okay. And that was my
7 question: Is it encumbered by a flood easement?

8 CHIEF ENGINEER BRADLEY: I don't know. If it is,
9 they don't have to acquire the property.

10 VICE PRESIDENT HODGKINS: Do you know?

11 MR. SHAPIRO: I don't. But there seems to be a
12 disconnect in that argument. We're not touching that
13 property. You have to think about the perspective that
14 those regulations were drafted. They were, someone comes
15 in and wants to put a pipeline through a levee or stairs
16 or something like that. And so it's saying, on the
17 property that you are going to be working on, you need to
18 make sure that you acquire flood easements and the Rec
19 Board gets those.

20 But here's the actual area, and here is the levee,
21 right through here, and here is the irrigated agriculture.
22 And we're not talking that property. It probably has an
23 easement on it, although not an easement that meets the
24 current conditions, which are more extreme. But we're not
25 touching it. But the way this condition is worded, it

1 requires that we get the easement for it.

2 It's also worth noting, we, at Three Rivers,
3 doesn't oppose 50-foot setbacks. We think that's great.
4 The question is, because we're going in and fixing the
5 levees, as Rod Mayer earlier said, the state owns, should
6 we have the financial burden and the political burden of
7 eminent domain on all these properties to acquire
8 increased easements beyond that which the state got when
9 it built the project 50 years ago?

10 And so from a policy standpoint, we support it.
11 The question is, are we the ones who should be doing it,
12 especially on lands on that where we are not even touching
13 it?

14 BOARD MEMBER RIE: I have a question about eminent
15 domain and the fact that you have people who have -- the
16 person who built the brand new house, they are not going
17 to willingly give the State Reclamation Board or Three
18 Rivers or anybody else an easement at this point.

19 So I would imagine that we would have to resort to
20 eminent domain. So I'm just wondering, what would be the
21 legal argument for the courts to allow the eminent domain
22 to go forward when current policy and current regulations
23 and current law only require 10 feet? I agree with, you
24 know, getting as much as you can for flood fighting
25 purposes, but how would we support that if we had to go to

1 eminent domain?

2 MR. SHAPIRO: That is our -- part of our concern
3 is whether a court would agree that this is a legitimate
4 public use.

5 Now, courts have been very expansive in finding
6 public use. And I'm sure your attorneys can speak to
7 that. And a court might agree to this as public use.

8 We're just looking at it as a practical basis.
9 You can see, while Dan is correct, that the Segment 3 --
10 excuse me, Segment 1, which is not on this map, is
11 primarily agriculture. Segment 3 is urbanized. You can
12 see the tiny lots. So to make it personal, this is like a
13 Pocket or River Park or all the areas that -- the Mayhew
14 levee area.

15 Next time SAFCA comes in, is the policy going to
16 be, SAFCA, go get 50-foot easements and that means you are
17 taking 500 homes out and strengthening the levee. And
18 that's the practical implication of this condition.

19 BOARD MEMBER RIE: Scott or Nancy, do you want to
20 comment on --

21 LEGAL COUNSEL MORGAN: Sure. Well, I mean, the
22 entity that would be doing condemnation would be Three
23 Rivers, not the Board. And they would be going in to get
24 another permit from the Board. That said, we require a
25 50-foot easement. So that's a condition of the project.

1 And so they would be showing to the court that the
2 public needs that land for the project.

3 I think they would be able to meet their burden
4 fairly easily, and someone would have to attack the Board's
5 underlying findings that this was arbitrary and
6 capricious, which I think, given what Mr. Fua has said
7 about the need for a broader easement in an area, subject
8 to failure in flood fighting, I don't think that someone
9 could attack the Board's finding on that. That would be
10 inadequate grounds for this.

11 But the regulations don't specify any specific
12 easement distance away from the landward toe. I mean,
13 it's generally 10 feet, but it could be more, it could be
14 less. Hopefully not less.

15 But I think that it's -- I think that both Mr. Fua
16 and Mr. Shapiro are raising very important points here.
17 One is that there are some very important policy reasons
18 for looking at broader easements. This is something that,
19 as both had indicated, was incorporated into SAFCA's
20 permit.

21 But also, I think, you know, you do have a problem
22 if the cost of the project, if you are condemning a lot of
23 properties, and we have to look at the grounds for doing
24 that and the cost of doing that.

25 But at this point, we just don't have enough

1 information in front of us.

2 BOARD MEMBER RIE: Is it reasonable to -- I think
3 I heard; I may be wrong, that SAFCA already had the
4 right-of-way; they owned it. So it was probably
5 unencumbered, so it probably wasn't a problem and it
6 wasn't a burden to dedicate an additional 50-foot easement
7 to the Board.

8 But in their case, they are saying that there's
9 home relocations, there was a sewer plant, all sorts of
10 ultimates that would be impacted.

11 So would it be reasonable for us to ask to
12 relocate all those facilities under the circumstances?

13 LEGAL COUNSEL MORGAN: The grounds for determining
14 reasonableness are not going to be cost. It's going to be
15 what is the public necessity if this is related to flood
16 fighting and protection of the flood system. Then the
17 cost determines what you do, perhaps, in terms of how you
18 physically engineered your project. But in terms of what
19 is reasonable, if the Board makes a finding based on the
20 evidence that 50 feet is reasonable under the
21 circumstances, then the fact that it's going to cost money
22 to move the homes isn't really relevant.

23 PRESIDENT CARTER: Would it be possible to word
24 the permit in a way where perhaps the existing facilities
25 that would encroach upon a 50-foot easement would be

1 grandfathered and any new development -- we would be able
2 to acquire an easement on undeveloped or un-encroached
3 property within the easement at this point?

4 I think the real concern is, we work around
5 encroachments all the time, but we don't really want to
6 make the problem any bigger. And so, would it be possible
7 to structure the permit in that way, and would that be
8 less of a burden to the applicant and still be workable?

9 I propose that to staff as well as workable to the
10 applicant?

11 MR. SHAPIRO: Well, breaking down the proposal to
12 see if I understand it, so you are saying, for example, on
13 Segment 1, the lower segment, which is primarily in
14 agriculture, your condition would be that there are -- the
15 easements should be acquired. We should take out the
16 25 acres of agriculture. But up above, where there's a
17 house, we shouldn't acquire because of the impact to the
18 house? I just want to make sure I'm understanding.

19 PRESIDENT CARTER: My understanding of an easement
20 is that you don't necessarily take out what is there.
21 What you have is an easement to do things in the future,
22 if you need to.

23 So that property, if it's in ag, could still be
24 farmed, as it is today. And yes, you are acquiring a
25 right to do something on that property in the future. So

1 yes, you will incur costs. But you don't have to change
2 what's happening there today necessarily.

3 MR. SHAPIRO: That's correct. We would still have
4 the 16 million in costs, but we wouldn't necessarily have
5 to kick anyone off their property.

6 PRESIDENT CARTER: I don't know what the cost is.
7 But I do know that you don't have to take out the orchard
8 or the trees that are there, in that 50-foot easement
9 today. We may in the future, and that's what we're doing
10 is we're buying the right to do that in the future, if we
11 need to. And it's not a guarantee that it has to be done
12 or that it will be done. It's just that we have the right
13 to do it if we need to.

14 MR. SHAPIRO: And that actually works relatively
15 well for agricultural land. You're right, that would
16 reduce our costs by \$250,000, which would be the damage we
17 would pay for lost crops, because we wouldn't be taking
18 their crops out. But in the northern urban area, we're
19 still having to buy the right to demolish the house, and
20 it would --

21 PRESIDENT CARTER: I'm saying that we wouldn't.
22 In that case, those things would be grandfathered in.
23 Those existing physical encroachments that are facilities,
24 like the sewer plant, like a house or whatnot, that are --
25 that comply with the existing encroachment guidelines that

1 is we have, the 10 feet, they would be grandfathered in.

2 But those that are not developed, we would have
3 the easement so that those things -- so the problem would
4 not get any larger.

5 Facilities would not be built in that -- in that
6 40-foot area between our existing 10-foot and the 50-foot.

7 MR. SHAPIRO: So the condition would be that the
8 applicant must purchase necessary easements on all
9 undeveloped land?

10 PRESIDENT CARTER: And we would have to define
11 "undeveloped," yes.

12 MR. SHAPIRO: Fundamentally, we're looking at less
13 than a \$20 million project here, which, worst case
14 scenario, we have a \$16 million additional cost, and even,
15 as you have pointed out, still have millions of additional
16 costs.

17 If the Rec Board wants to partner with Three
18 Rivers to make this happen and bring DWR to the table and
19 try to do cost-sharing, that's great. We've already
20 submitted our 1E application for some funding for this
21 section. And now, we would be looking at increased costs
22 to go back and do this.

23 If you will look at the Corps' recent
24 certification letter on the existing levees in the Yuba
25 area, the Corps said, "You need to work towards attaining

1 access." And it seems like this is going well beyond
2 attaining access.

3 So from our perspective and, of course, our board
4 hasn't opined on this yet, because we just got it this
5 week. But from staff's perspective, it seems like a
6 burden. It's a financial burden. It's a political burden
7 to go out and acquire all these easements and tell people
8 that they may not be able to do something with their
9 property in the future. And we just -- we don't value --
10 we don't disagree with the value of the easements.

11 We question whether when we're approving --
12 improving the state levees, we should be burdened with the
13 costs of acquiring the cost of the easements.

14 PRESIDENT CARTER: Steve?

15 CHIEF ENGINEER BRADLEY: Yeah. Several points
16 here. One, they did provide us with a 50-foot easement
17 along the Bear River setback. So they had done this in
18 the past. On that easement, we did exclude the area that
19 had already been proposed for development. It was
20 already, you know, approved on the plat map for the east
21 end of that levee. And that -- we only required a 10-foot
22 easement.

23 We have not received any of those yet, so the
24 point that they wouldn't be able to go ahead with their
25 setback levee, if they require them to provide the

1 easement up front, that's standard language we put in
2 there. Almost never are the land rights provided to us up
3 front. They are done usually by the end of the project.
4 So we work around that all the time. I think the language
5 could be tweaked to where we get the 50-feet, where it is
6 available, and not require it where we have to demolish
7 houses.

8 I'm going to say that 50 feet is probably just a
9 minimal amount that we would like to keep people away from
10 the levee. You know, all the problems we have along the
11 American River and the Sacramento River and the Pocket
12 area, I think where we can get this, we should get it
13 today. This is not a big -- a big chunk of this is not
14 urban. It is rural. They are going to encumber some
15 costs. They are getting a big chunk of money from the
16 state on the setback levee. The biggest cost, as Scott
17 pointed out, is in the floodway.

18 And I think this Board could make a reasonable
19 finding that they are not touching the levee other than
20 doing improvements and that they shouldn't be required to
21 buy property that the state didn't acquire for the system
22 in the first place.

23 I don't know how much of that has an easement or
24 not. We could look into that. But I think on the
25 landside, we should get that 50-foot easement where it is

1 available.

2 Also regarding SAFCA having an easement, they did
3 not have an easement for the entire -- there was a partial
4 easement for the part of the Natomas levee, the
5 cross-canal that you approved a couple of months ago. But
6 the project is going to be coming before you that takes it
7 from the cross-canal all the way down to Prichard pumping
8 plant. SAFCA is acquiring around 400 feet there in order
9 to put in the seepage berm plus our 50 feet. So they do
10 not have that. They feel that that's what they should be
11 doing.

12 There isn't any reason that some of that land
13 could not be used as open space or for other activities if
14 you so choose. I believe SAFCA has actually acquired a
15 fee and use part of that as mitigation. You would have
16 access to it. You would be able to remove trees if you
17 need to, but it would also offset the mitigation, some of
18 the giant garter snakes, some of that kind of stuff.

19 So I understand there's increased costs here. The
20 biggest cost is within the floodway. The Board could make
21 a finding that that's unreasonable to require the
22 applicant to acquire that, based on what they are doing
23 here, when the state didn't acquire the original project,
24 but on the landside. I believe we should attempt to get
25 50 feet where we can get 50 feet.

1 VICE PRESIDENT HODGKINS: I actually think that's
2 a pretty reasonable proposal, although I think I would
3 further define what's available as when it isn't
4 designated for urbanization, because if you start
5 acquiring -- the land that's designated for urbanization
6 has a very high value simply because it's designated for
7 urbanization. And presumably, although I'm uncertain of
8 this, you know, there was a concept plan that involved
9 getting the maximum yield in terms of lots from the
10 available plan. And you suddenly take a 50-feet strip out
11 of that, you may end up costing somebody a whole row of
12 lots or whatever. And so those are kinds of cases
13 where -- I'm not sure I think that land is available.

14 But where there is no designation for
15 urbanization, I agree with Steve. I'm not sure it's for
16 flood fighting, in my own mind, as much as it is based on,
17 you know, looking at what we've learned. And what we've
18 learned is we haven't built a levee yet that we were happy
19 with 10, 15, 20 years later on. And so when we don't give
20 ourselves room to go back in and make a fix, that's
21 craziness, considering what we know about the likely
22 future conditions here in the Sacramento Valley.

23 But I do think you have to temper making that
24 transition. And it would be interesting to see if SAFCA
25 will propose to get 50 feet, whether there are already

1 houses up against the levee and they would have to take
2 houses out. I'm pretty sure they would not do that.

3 So I think this is -- Steve's proposal, is in my
4 mind, realistic with recognition of the fact that it has
5 an urban designation. I don't think we should force them
6 to try and get the easement if it's not urbanized. And
7 this would be a general plan designation. We should get
8 the easement.

9 And the easement language is something that can be
10 worked out over time, because what it mainly does is
11 preclude, in my mind, anybody from putting something in
12 there that would permanently preclude us from using that
13 ground for flood control or flood fight.

14 And I don't know how -- I would add to that, that
15 is, assuming DWR would agree that the costs associated
16 with this acquisition would be costs that would be
17 considered eligible project costs. I mean, if DWR is
18 going to say, "We're not going to consider this part of
19 the work that's necessary," then I think the Reclamation
20 Board and DWR need to have a discussion that we shouldn't
21 put these folks in, trying to work that out for us.

22 So I guess I'm saying, if it isn't designated for
23 urbanization, I think it's reasonable to ask you to get
24 50 feet, and subject to DWR saying, "Yeah, we think that's
25 probably something we would participate in the funding

1 of." And you can work out the steps, the detailed
2 language of the easement, so we don't make somebody remove
3 their walnut trees or their irrigation system or
4 whatever's out there now, and have minimal impact,
5 particularly, when the land is agriculture on the current
6 use of the land.

7 So I need you guys's comments to that first.

8 BOARD MEMBER BURROUGHS: Before comments are made,
9 Mr. President, are we going to break for lunch? And if
10 so, at what time?

11 PRESIDENT CARTER: I hope we do break for lunch.

12 (Laughter.)

13 PRESIDENT CARTER: But I would like to get some
14 comments before we do that.

15 MR. BRUNNER: Yeah, we do have a few more
16 comments. And we're not trying to protest a 50-foot level
17 or what you were talking about, Butch, is the -- there
18 were some clarifications; there are points I feel
19 compelled to make. We did have a setback, 50-foot, on the
20 Bear. That was for utility easements and we thought that
21 was good.

22 I had an interesting conversation with RD 784
23 recently about that and just the maintaining of the
24 50-foot area we have of the Bear, and it becomes a burden
25 on the RD district to do that. And it is reflected by the

1 utilities. I'm Segment 2, for the Feather River, we're
2 proposing to do a utility corridor.

3 Segments 1 and 3 that we have here is a new
4 requirement that has popped up, literally in the last
5 couple days. And there's reasons for that, which we are
6 assessing, which I'm trying to get across to you all, and
7 Scott too, is that the financial plan for those additional
8 costs and it's lowering as we go through -- and we
9 appreciate eliminating the floodway, potentially, and the
10 urban comments that you made are good, is that right now,
11 the requirement comes in. The funding for the
12 additional -- it all costs money.

13 We have an application in for the state for Prop
14 1E. We have made Segments 1 and 3 part of that
15 application. The state has indicated but it's a
16 strengthen in place portion, that it may not be high
17 priority on it. Strengthen in place options are not high
18 priority under Prop 1E funding. Multi-objective projects
19 with setbacks in those sections is very high priority,
20 under their scheme. We're advocating that we do get
21 funding for that.

22 So I do not know if we're going to actually get
23 Prop 1E funds for Segments 1 and 3 and this comes back
24 when Rod and his crew comes forward and lets us know what
25 comes back from our application.

1 Part of what we have and as -- whatever policy you
2 go with, I would like for the DWR, our staff, RD 784, your
3 staff, have an opportunity to actually sit down in one
4 forum, which I offered up earlier, in the last few days,
5 to work out what is a reasonable agreement on this
6 condition, which we have not done.

7 RD 784 really doesn't necessarily agree with the
8 50-foot floodplain. I'm not sure that matters, perhaps.
9 But in the context in here, what you are offering up,
10 Butch, makes sense to me. But there's other parties
11 involved, which we need to come through and work through
12 with what this requirement is on it.

13 So as you come to your conclusion here, I would
14 like for you to keep that in mind that we do allow
15 resolution of this with at least an agreement, put
16 boundaries on it like you are talking about, but allow
17 some flexibility that there is some other sanity or some
18 other reason that needs to be built in, that Jay would
19 have the ability to adopt that.

20 BOARD MEMBER RIE: I have a question for
21 Mr. Brunner. Has there been any discussions with the
22 residents who live behind this levee?

23 MR. BRUNNER: The 50-foot?

24 BOARD MEMBER RIE: Yes.

25 MR. BRUNNER: No. We just heard of this, actually,

1 a few days ago.

2 BOARD MEMBER RIE: So is it reasonable to assume
3 that the property owners are complete unaware of this
4 proposal?

5 MR. BRUNNER: Unless they are here today, yes.

6 MR. REINHARDT: Two quick comments. This is Ric
7 Reinhardt, Three Rivers program manager.

8 The first is that we conducted a feasibility study
9 in which we laid out what our real estate acquisition
10 requirements are, including our waterside and landside
11 easements. We provided that to the Department of Water
12 Resources, the Reclamation Board, and the Corps.

13 And we didn't receive comments, that that was
14 going to be inadequate.

15 So it's a little frustrating, that at the 11th
16 hour, days before the Board's taking action, that a change
17 in the project is being proposed that's going to
18 significantly increase our costs. That also has
19 implications to our funding agreement.

20 The second comment is, in our discussions with
21 senior management Department of Water Resources, they have
22 told us that they would -- they want us to acquire the
23 property and fee if they ultimately agree on funding
24 Segment 2. Their experience with flowage easements is
25 that it's too difficult dealing with the landowners, over

1 time, in the long run, to go and do the actions that are
2 necessary by the Department of Water Resources.

3 My own experience would tend to support that. If
4 a fee is close to full acquisition, then it's in the flood
5 control's best interest to go ahead and honor the fee.
6 It's an issue of discussion earlier, where if it's an
7 agriculture, it stays an agriculture. At least from my
8 perspective, if we're going to go higher than 50 feet,
9 let's acquire it, let's get the property rights, let's
10 clear the land, and let's maintain it for flood control.

11 PRESIDENT CARTER: It's kind of interesting that
12 you mention that. Because I had a conversation with
13 senior DWR folks and asked that very question and they
14 said it would be preferable actually to have an easement
15 as opposed to have it in fee, because once they acquire
16 it, they immediately have a land management issue that
17 they don't want to deal with, and they would rather have
18 it in private ownership than have the easement.

19 So it completely contradicts what you just said,
20 Mr. Reinhardt.

21 MR. REINHARDT: Rod Mayer is the one that made
22 that comment. I would encourage you to bring him before
23 the Board so he can respond directly to comments on the
24 Segment 2 project, where we had proposed purchasing
25 50 percent of the Segment 2 property and easement, and we

1 were asked to change it to a hundred percent in fee. And
2 that's what's in our Prop 1E application now.

3 BOARD MEMBER BURROUGHS: There's lots more
4 comments. I recommend we break for lunch.

5 PRESIDENT CARTER: Any other questions for
6 Mr. Brunner?

7 What we'll go ahead and do is, we're going to go
8 ahead and break. I think that the Board needs to consider
9 its options. I think we -- we have an option to continue
10 this as has been brought up. We have an option to try and
11 take action, and allow the staff to resolve and iron out
12 the unsettled issues at this point.

13 All of that has implications toward the project
14 and it's timing and cost. And we all needs to consider
15 those. So over lunch, let's do some thinking. Maybe the
16 staff can think about what their recommendation is, if
17 that is revised, from the staff report.

18 And we'll continue this. It's now 12:20, so we'll
19 go ahead and let's try and start again at 1 o'clock. So
20 we have 40 minutes for lunch.

21 (Thereupon a break was taken in
22 Proceedings.)

23 PRESIDENT CARTER: Good afternoon, ladies and
24 gentleman. Welcome back to the State Reclamation Board
25 meeting.

1 As you may recall, we were discussing Item 8, the
2 application of Three Rivers Levee Improvement Authority
3 for the strengthening of Segments 1 and 3 for the Feather
4 River levee.

5 We were -- we had accepted some public comment.
6 There was one other person that wanted to comment.

7 I don't know if they were able to stay.

8 Mr. Barnhart?

9 MR. SHAPIRO: He left.

10 PRESIDENT CARTER: He is no longer with us.

11 So we are at a point now where I don't know if the
12 staff has revised their recommendation to the Board. If
13 they have, we would like to hear that at this point and
14 then go ahead and proceed.

15 CHIEF ENGINEER BRADLEY: Dan actually will make
16 the recommendation. He's already made the recommendation
17 if you want to have him read it again.

18 I had a couple of points I did want to make. They
19 talked about increased maintenance responsibility. If you
20 obtain an additional area, I will assure you that the
21 increased maintenance is more than offset by the reduction
22 enforcement encroachment control, which is an ongoing
23 headache in Sacramento, in the Pocket area and along the
24 American River and probably in parts of Natomas, although
25 that's not encroached on the levee as much, except for the

1 Garden Highway, which is on the waterside of the levee.

2 Butch mentioned this, that, you know, the -- as
3 designed today, you know, if you just got the 10-feet -- I
4 can assure you that when the Corps comes out, if they say
5 that you need a .4 exit gradient instead of the .5, that
6 this project is designed for 10 feet, will automatically
7 go down to zero or five or even negative, and you have to
8 acquire more material.

9 Flood fighting in a 10-foot zone in this area is
10 extremely difficult. This area has had numerous boils
11 over the years more than 50 feet from the toe in the area
12 of hundred or 200 feet from the toe. So I don't think the
13 50 feet is unreasonable in this area, and I would like the
14 Board to make sure that they do consider a staff request
15 here. I think we can work out some of the issues. It
16 probably will take a meeting. We haven't been -- we're
17 not going to require the applicant to be buying houses and
18 tearing them down, just -- you know, public-wise that's a
19 very difficult thing to do. Not that I don't think we
20 probably should do that, but it just is not a very popular
21 thing to do, a lot of emotional value involved.

22 Anyway, I think -- we hope the Board considers
23 staff's request on this issue.

24 PRESIDENT CARTER: Okay. Mr. Fua, could you go
25 ahead and restate what the staff's recommendation is for

1 this permit.

2 SUPERVISING ENGINEER FUA: Again, for the record,
3 Dan Fua, supervisor engineer, Reclamation Board.

4 The staff recommendation -- recommendations are:

5 For the Board to make findings that environmental
6 impacts of this project within the jurisdiction of the
7 Board have been mitigated or avoided as a result of
8 changes, alterations of mitigation measures incorporated
9 into the project.

10 Mitigation measures set forth in Three Rivers' EIR
11 relating to flood control and published safety are hereby
12 adopted, and Three Rivers mitigation monitoring plan is
13 incorporated by reference.

14 And based on the evidence presented to the Board,
15 the project will not result in hydraulic impacts that have
16 a significant effect to the environment.

17 I also request that the Board approve the draft
18 Permit No. 18170 for the project, subject to any changes
19 that may be required by the Corps' comment letter.

20 And finally, I request the Board delegate
21 authority to the general manager to finalize the permit
22 subject to the conditions as required in the comment
23 letter by the Corps of Engineers; and issue the permit,
24 provided that the general manager shall not approve a
25 final permit if the chief engineer for the Board

1 determines that any changes to design parameters required
2 by the comment letter are substantive in nature.

3 PRESIDENT CARTER: Thank you.

4 Any questions?

5 What's the Board's pleasure here? Any motions?

6 VICE PRESIDENT HODGKINS: This is a hard one to
7 word. Let me take the least difficult one first.

8 I would like -- I'm going to move that we follow
9 the staff recommendation with amendments: One of the
10 amendments I would like is that in 3.B, we have wording
11 here that says the general manager shall not approve a
12 final permit if the chief engineer of the Board determines
13 any changes to the design parameters required by the
14 comment letter are substantive in nature.

15 That just fundamentally -- unless there's
16 something in our regs or the Code, creates the situation
17 that is not what I think of as the general manager's
18 responsibility. I mean, to me the way this works is, the
19 general manager's got to work out -- listen to staff and
20 make his own decision about their comments, suggestions,
21 recommendations. But then he makes the decision. I don't
22 like bifurcating the authority for a decision here between
23 the general manager and the chief engineer.

24 So I would simply leave -- where that issue --
25 issue the permit, provided that the general manager

1 determines that any changes to the design parameters
2 provided by comment letter is substantive in nature. I
3 guess that any design -- any changes to design parameters
4 required by the comment letter are not substantive in
5 nature.

6 And understand what I am trying to do here is, the
7 general manager, his job is to work with staff, consider
8 their recommendations. But in my view, at least -- and if
9 the other Board members have different views, speak up --
10 he is the final say at the staff level for what happens.
11 This is not, if you can get his permission, then you can
12 do this. It doesn't -- that's not my expectation of the
13 general manager. He's the one I want to turn to and say,
14 "Fix this," if it needs to be fixed.

15 And so I guess I just want to, maybe, just strike
16 B, because I can't word it correctly in a short period of
17 time. Okay?

18 Now, I want to add guidance on the conditions that
19 relate to the acquisition of easement. This is guidance,
20 of course. Okay? First of all, I think we're not -- we
21 do not require the applicant to secure an easement of the
22 property beyond 10 feet from the waterside toe of the
23 levee.

24 SECRETARY DOHERTY: Waterside or landside?

25 VICE PRESIDENT HODGKINS: Waterside. Waterside.

1 Okay? This is in the floodway there. I'm not saying he's
2 going to go buy all the land that's in there.

3 On the land side, the easement would be 10 feet in
4 areas that are designated for urbanization on the current
5 general plan and 50 feet in other areas. And with that
6 guidance, I would then authorize the general manager to
7 approve -- to work out the final language in the permit.

8 Now, can you say that back to me in a nice tidy
9 package?

10 LEGAL COUNSEL MORGAN: Might I have a copy of your
11 notes?

12 PRESIDENT CARTER: Butch, I think what I heard
13 was, there's a -- no requirement for the applicant to
14 require easements beyond 10 feet of the waterside of the
15 levee.

16 VICE PRESIDENT HODGKINS: That's correct.

17 PRESIDENT CARTER: And the -- regarding the
18 landside easements, it's a 10-foot minimum easement in
19 areas that are designated as urban, and 50-foot easements
20 in all other areas.

21 VICE PRESIDENT HODGKINS: In all other areas.
22 Okay.

23 PRESIDENT CARTER: That's what I heard.

24 VICE PRESIDENT HODGKINS: That's what I intended.

25 And the bifurcation of authority is issuing the

1 permit to the general manager.

2 PRESIDENT CARTER: You are striking B, 3.b.

3 VICE PRESIDENT HODGKINS: You know, I'm not trying
4 to be mean or anything, Steve. It's just how I think
5 organizations work.

6 PRESIDENT CARTER: So we have a motion on the
7 table. That essentially is a motion to accept staff's
8 recommendation on Permit No. 18170, with the following
9 amendments: that we strike Item 3.b from the
10 recommendation and that there's a clarification that
11 there's no requirement for an easement beyond 10 feet of
12 the waterside toe of the levee; and on the land side,
13 there's a 10-foot easement from the toe of the levee,
14 minimum in areas that are designated as urban and 50-foot
15 easement from the toe on all other areas.

16 Does everybody understand the motion?

17 Any discussion?

18 BOARD MEMBER BURROUGHS: My -- my comments would
19 be that -- I'm not comfortable at all with having this
20 coming before the Board on such short notice.

21 Three Rivers themselves have, in two different
22 comments, said they only received information two days
23 prior to meeting. Our staff hasn't had a chance to review
24 in depth with enough time, if they just received the
25 information from the Corps last night.

1 I would like to hear comments from the Corps.

2 I want to just take a moment to say that I commend
3 all the good effort, and I want to see a very good level
4 of protection for the state of California.

5 When things are pushed through to where we're
6 receiving information at the last minute and the Board
7 members receive just the information on the day of the
8 meeting, to me, is not acceptable to bring to this public
9 hearing for a vote.

10 I hope this motion fails, and I hope we can bring
11 it back to the Board next month or when our next scheduled
12 meeting is. I very much want to expedite this whole
13 project and get it completed as quickly with the upmost,
14 best level of protection for the people of the state.

15 PRESIDENT CARTER: Okay. Any other comments?

16 Hearing none, Mr. Punia -- do we have a second?

17 SECRETARY DOHERTY: No.

18 PRESIDENT CARTER: We don't have a second yet.

19 Do we have a second?

20 BOARD MEMBER RIE: Second.

21 PRESIDENT CARTER: Okay. We have a second.

22 Any further comments? Lady Bug? Teri? You guys
23 have anything you want to say?

24 SECRETARY DOHERTY: No, I would just reiterate the
25 same thing. You complained about not having the

1 information soon enough. We need the information sooner
2 also. So I think it needs to be studied.

3 PRESIDENT CARTER: All right.

4 BOARD MEMBER BURROUGHS: I would like to make one
5 more comment. And that is, I have not heard any evidence
6 of the slurry walls, the cutoff walls, being the best
7 proposal for this area of the system. And for that reason
8 also, I would like to have Corps comments to review that.
9 It's been stated by numerous people that there are
10 numerous areas of problems of boils.

11 Thank you.

12 PRESIDENT CARTER: Okay. And that discussion --
13 we can have that discussion -- probably not appropriate
14 under this agenda item, but, actually, Butch made the
15 request earlier to find out if there was evidence if the
16 slurry walls were, in fact, an effective solution --
17 demonstrated effective solution.

18 Okay. So we have a motion and a second.

19 BOARD MEMBER RIE: I have one more comment.

20 PRESIDENT CARTER: Yes?

21 BOARD MEMBER RIE: Steve Bradley had made the
22 comment earlier that he thought it would be appropriate to
23 look at getting the 50-foot easement where we could, and
24 if this permit is delegated to staff today, I would
25 request that staff look very carefully at the width of

1 these easements, and if it's really feasible to get them,
2 and reasonable. And I just wanted to get that input.

3 SECRETARY DOHERTY: Are you directing the staff to
4 obtain the easements or to Three Rivers to obtain the
5 easements?

6 BOARD MEMBER RIE: No. I was just expressing and
7 reiterating what Steve Bradley said, that we really need
8 to look at where it's appropriate to get additional
9 easements. And I would assume that staff would have those
10 discussions during the regular course of business with the
11 applicant.

12 SECRETARY DOHERTY: But it's saying here that the
13 applicant is the one that has to obtain the easement.

14 BOARD MEMBER RIE: That's correct. But they would
15 have discussions with staff.

16 PRESIDENT CARTER: What you are asking, Teri, is
17 far staff to seriously consider what kind of easement they
18 really need and what's feasible?

19 BOARD MEMBER RIE: Thank you President Carter.

20 PRESIDENT CARTER: Okay. All right.

21 So any other further comments?

22 Mr. Punia, could you call the roll, please.

23 GENERAL MANAGER PUNIA: Vice President Butch
24 Hodgkins?

25 VICE PRESIDENT HODGKINS: Yes.

1 GENERAL MANAGER PUNIA: Board Member Teri Rie?

2 BOARD MEMBER RIE: Yes.

3 GENERAL MANAGER PUNIA: Board Member Lady Bug?

4 SECRETARY DOHERTY: Yes.

5 GENERAL MANAGER PUNIA: Board Member Rose Marie

6 Burroughs?

7 BOARD MEMBER BURROUGHS: No.

8 GENERAL MANAGER PUNIA: President Carter?

9 PRESIDENT CARTER: No.

10 So the motion fails.

11 Do we have another motion for the Board? Shall

12 we -- or we could table this unless there's another

13 proposal to move forward.

14 BOARD MEMBER BURROUGHS: I would recommend we

15 table it and bring it up again at the next meeting.

16 PRESIDENT CARTER: Is that acceptable?

17 VICE PRESIDENT HODGKINS: It is -- I think it's

18 important to -- specifically, what additional information

19 we need at that meeting. Okay? So I would encourage each

20 of the Board members to try and do that.

21 PRESIDENT CARTER: Okay.

22 I think, clearly, there are a lot of unanswered

23 issues here that -- and what we need to allow time for is

24 for the staff to get together with the applicant, discuss

25 the 50-foot easement, whether or not that's -- how that

1 would be structured and whether or not that's the right
2 number. We need to allow staff time to review and react
3 to the Corps comments that just came in yesterday. We
4 need the applicant -- to allow the applicant time to do
5 that as well, and for there to be hopefully a more unified
6 recommendation that comes before the Board next month.

7 That would be my expectation.

8 VICE PRESIDENT HODGKINS: Okay. That's very
9 helpful. And I would agree with it, that that would be my
10 expectation as well. You guys go work it out.

11 PRESIDENT CARTER: Okay. So we will go ahead and
12 table this. It will be agendized for the June meeting.
13 And we encourage staff and the applicant to work hard on
14 ironing out the details, please.

15 SUPERVISING ENGINEER FUA: Thank you.

16 PRESIDENT CARTER: Thank you.

17 Mr. Shapiro, did you have something on this?

18 MR. SHAPIRO: I did. I apologize. I know you are
19 trying to move your meeting along.

20 I just -- I'm not sure that I know what I'm asking
21 for, but we've just got some information that suggests
22 that not issuing the permit may delay construction, so it
23 can't happen this year.

24 And I apologize. I'm working with partial
25 information, but I understand that Jim Sandners said that

1 the letter that was sent last month by the Board to start
2 the Corps review process, sometimes referred to as 408,
3 that that letter is not adequate to start that process.
4 And if it is not adequate then it won't be adequate until
5 you issue a permit, which would now mean you wouldn't be
6 issuing it until June, which would mean, under the
7 schedule we've seen before, we might not get 408 approval
8 until August or possibly later, which would mean we
9 couldn't construct this year.

10 Now, as we've shared in subcommittee meetings,
11 this is not the weakest link on the Feather River, but
12 it's important that you at least be aware of that
13 consequence.

14 One approach would be to perhaps table this for
15 later in the meeting, and if there was a break
16 opportunity, we could talk to staff and see if we could
17 come up with a proposal on the easements which is
18 acceptable. I recognize that does not address Board
19 Member Burroughs's comments about the Corps comments. But
20 at least we can try to do that. So I throw that out. I
21 don't know if Jim or Ric have anything to add.

22 PRESIDENT CARTER: I think the Board is receptive,
23 in any way, we can move this forward and get it off our
24 plate, that's great. But we do need to do our due
25 diligence. And I would be very interested in Mr.

1 Sandner's comments about the inadequacy of our letter. I
2 mean, do you need a permit, or what needs to happen with
3 this letter?

4 MR. SANDNER: We have two letters from the Board.
5 The first letter was a request for the encroachment permit
6 for this project, which came to us, I believe, last
7 January. And we have reviewed that and submitted about
8 six pages of the comments. And some of those comments are
9 very technical in relationship to the design of the
10 project.

11 The other thing that the Three Rivers folks have
12 asked for is permission under Section 408 for an
13 alteration to the project. And they have actually
14 submitted a package of materials for us to begin review
15 on, which we have done.

16 The Rec Board also sent us a letter early in May,
17 asking us to start the 408 review. However, what we are
18 beginning to need from the Reclamation Board, before we
19 can send a request forward to headquarters for review, is
20 the same kind of letter that the Rec Board sent to us for
21 the Bear River setback project. And that's a letter that
22 includes the Rec Board saying that they will provide
23 operation and maintenance of the project, that they will
24 accept it into the system, and that they will agree to
25 hold the federal government harmless.

1 Until I have a letter like that, I can't actually
2 forward the 408 package. So I would encourage the Rec
3 Board to look at the letter that was sent to us on Bear
4 River and fashion one in the same manner, and send it to
5 the Corps as soon as possible.

6 Again, we have recommended, in our encroachment
7 permit, comments that the encroachment permit be a
8 conditional permit based on approval of the 408 request
9 being approved at the headquarters level.

10 PRESIDENT CARTER: Okay. I think unless I misread
11 the Board's intention, I think the Board's intention was
12 to -- was to try and launch the Corps' review of their --
13 whatever authority they choose to review the project
14 under.

15 And I guess I need to ask Scott or Nancy if the
16 Board's intent was to do that, and we happen to get the
17 wording wrong in our letter, can we -- I know it's not
18 agendized today, but it was agendized last month, and we
19 took action on it last month. If it was the Board's
20 intent to have a letter worded according to the way
21 Mr. Sandner had requested, the way we did it on the Bear
22 River, can we go back without bringing it back before the
23 Board and send that letter?

24 BOARD MEMBER RIE: President Carter, I believe we
25 delegated the writing of that letter to staff, and I

1 believe we delegated the authority to work with the Corps
2 to come up with a letter for our general manager's
3 signature.

4 GENERAL MANAGER PUNIA: We coordinated with the
5 Corps and the applicant, and that letter was sent to the
6 Corps, asking the determination that what type of -- under
7 what authority the Corps will authorize this modification.
8 And Jim, when that letter was sent -- in your mind, do you
9 think you need another letter?

10 LEGAL COUNSEL MORGAN: Well, there was a --
11 President Carter did have a question about what the Board
12 authorized last month and what you did right now. There
13 were none of the actions taken that would have allowed the
14 Board to write the kind of letter that the Corps says they
15 need. There was no decision to accept it into the
16 project, to hold the Corps harmless or operation or
17 maintenance or any of those things, because there had been
18 no review of the project.

19 And so what the Board did at the last meeting was
20 basically asked an advisory opinion of the Corps to launch
21 the process, if they would launch the process under those
22 terms. They are telling us now, no, they will not launch
23 it under those terms, which means that the Board has to
24 take more action and get to a different level of review
25 and accept this as a project before we can send a letter

1 that's consistent with what the Corps will require before
2 they will undertake their review.

3 MR. SANDNER: Actually, what I said was, we have
4 started a review of the package that was submitted to us
5 for an alteration permit under Section 408.

6 However, we cannot forward that to headquarters
7 for their permission until we have the same kind of letter
8 from the Reclamation Board that was submitted with the
9 package for Bear River.

10 LEGAL COUNSEL MORGAN: I stand corrected once
11 again.

12 BOARD MEMBER RIE: But couldn't staff work with
13 the Corps under the previous delegation that we approved
14 last month, to work with the Corps to come up with
15 language that would be acceptable to the Corps? I mean,
16 it was a pretty vague and general delegation.

17 LEGAL COUNSEL MORGAN: But it really didn't -- the
18 Board has not taken any action on the project at all.
19 Staff can't assure the United States government that the
20 state of California is going to do something that the
21 Board hasn't taken any action on.

22 VICE PRESIDENT HODGKINS: I have a slightly
23 different take on what happened. And it comes about
24 because there's still a certain amount of frustration with
25 the whole 408 process. So in some way, the Board is

1 reluctant to be the first person to say, this is the 408
2 project.

3 Now, I'm going to say that at least my impression
4 was, the applicant didn't want us to do that either.

5 So the first question I'm going to ask the
6 applicant is, do you want us to acknowledge that 408 is
7 the process that's going to cover this? This is just for
8 clarity sake.

9 MR. SHAPIRO: You are correct that we requested
10 the letter. I'm specifically referencing 408. We have
11 prepared the 408 application packet itself and provided it
12 to your staff and to the Corps.

13 So we are okay with any way it needs to be stated
14 to get the process going.

15 VICE PRESIDENT HODGKINS: At this point.

16 MR. SHAPIRO: At this point.

17 VICE PRESIDENT HODGKINS: I think this is an
18 example of what happens when we don't get right in and
19 address what the issues are. And so I think the Board has
20 to understand, when these projects come forward, if you
21 want the Corps to start the 408 process, you are going to
22 have to say, we're prepared if the project is approved, to
23 provide the necessary guarantees and acknowledge that it's
24 408.

25 Otherwise, we can play the game back and forth.

1 And I agree with staff, listening to this Board discuss
2 it, I would have been very reluctant, as a staff member,
3 to write a letter that proposed to do that.

4 So I think it's a case where the Board has to be
5 more willing to step up even though we don't kind of like,
6 many of us, the 408 process is here, and not acknowledging
7 that it causes delays.

8 BOARD MEMBER RIE: I don't think the Corps is
9 asking us to name the specific code that they are going to
10 use to review this application.

11 I think the Corps is looking for some assurances
12 that the state is going to operate and maintain the levee
13 after the improvements are made and are looking for
14 assurances that we're going to hold them harmless. I
15 don't think Jim Sandner said anything about, you know,
16 please revise the letter and name 408 as the --

17 PRESIDENT CARTER: I think we're kind of getting
18 off topic here. Maybe we can -- thank you for your
19 clarification, Mr. Sandner, on what the Corps'
20 expectations are with the letter. We will attempt to
21 comply.

22 MR. SANDNER: I do want to say that the technical
23 materials that Three Rivers has submitted to us for the
24 review for granting permission under 408 are very good.
25 And we expect to be able to review that in a very timely

1 fashion. So it's critical that we get the proper kind of
2 letter from the Rec Board to be able to move that forward.

3 Thank you.

4 PRESIDENT CARTER: Thank you.

5 SECRETARY DOHERTY: The plans they submitted are
6 very what?

7 MR. SANDNER: They are very good.

8 SECRETARY DOHERTY: Oh, very good.

9 GENERAL MANAGER PUNIA: I think once the Board
10 approves -- has approved the project, then we will be able
11 to send the letter which the Corps needs to get the
12 process going. Until the project is approved by the
13 Board, we cannot send that kind of letter, what the Corps
14 is asking us to write.

15 PRESIDENT CARTER: Very good.

16 Mr. Morgan?

17 LEGAL COUNSEL MORGAN: No.

18 PRESIDENT CARTER: Anybody else?

19 BOARD MEMBER RIE: So are we tabling this to later
20 this afternoon?

21 PRESIDENT CARTER: I think we probably ought to
22 table it to another meeting. And I foresee perhaps a
23 meeting in between now and our regular scheduled June
24 meeting, to address these issues. But we can talk about
25 that in the future agenda.

1 BOARD MEMBER BURROUGHS: I would be happy to meet
2 as soon as information is prepared and ready to present to
3 the Board, before our next scheduled meeting.

4 PRESIDENT CARTER: Okay. Mr. Brunner, something
5 quick?

6 MR. BRUNNER: A quick comment. I would like to
7 have at least a discussion on tabling or potentially
8 having a special meeting called for a construction
9 schedule with the Rec Board. Waiting until June and then
10 working with the Corps, if the Rec Board could entertain a
11 special meeting between now and your regularly scheduled
12 meeting in June.

13 PRESIDENT CARTER: I think we will entertain that.
14 We're going to do it under the future agenda item, later
15 on this afternoon.

16 MR. BRUNNER: Okay. Thank you.

17 PRESIDENT CARTER: Great. Okay. At this time,
18 there are several people that have come this afternoon for
19 timed items.

20 We do have Item No. 9 that was scheduled for
21 11:30. It's an internal Rec Board item. I would like to
22 propose and find out if there are any vehement objections
23 to postponing that to -- that discussion till after our
24 Item 12 on today's agenda.

25 Are there any serious objections to that so that

1 we can allow our guests to proceed?

2 If there are none, then we will go ahead and start
3 with Item 10, Hurricane Katrina, lessons for California's
4 Levees with Professor Robert Bea from the University of
5 California, Berkeley.

6 Good afternoon and welcome.

7 PROFESSOR BEA: Good afternoon, ladies and
8 gentlemen. First, let me say thank you for your time and
9 for this opportunity.

10 Hurricane Katrina has been one of the most
11 dramatic and shaking things that has entered my life. And
12 I would like to bring forward to you some of the lessons
13 so that we maybe can prevent the experience.

14 This is a picture of a place I used to live, New
15 Orleans, back in 1849. I would draw your attention to the
16 fact that New Orleans was, in fact, way upstream,
17 protected from the Gulf of Mexico.

18 --o0o--

19 PRESIDENT CARTER: This is 1849 New Orleans. This
20 is what New Orleans looked like back in 1849, a small
21 hamlet on the mouth -- or on the bank of a river. That's
22 the site today of the French Quarter that we love to go
23 and have good times at.

24 The swamp that's back behind that French Quarter
25 is the area that we inhabited from the period between 1849

1 and 2005.

2 --o0o--

3 PROFESSOR BEA: The levees were built there,
4 essentially, by laborers working with shovels, wagons, and
5 mules. And we'll see that theme repeated.

6 --o0o--

7 PROFESSOR BEA: This is an outline of the New
8 Orleans area hurricane protection system. Several
9 hundreds of miles of the protected levees from main
10 metropolitan, about 400 miles of -- in the two years since
11 Hurricane Katrina, we've gotten to know every inch and
12 foot of those levees.

13 --o0o--

14 PROFESSOR BEA: The next thing that's remarkable
15 is the topography of New Orleans. This is a cross-section,
16 and it's shown there at the top, from A to B. A to the
17 left is at the river, and B is out at Lake Pontchartrain.

18 You can see, we were occupying high ground of
19 something that had an elevation of 10 or 12 feet. Now,
20 the city has spread all the way out to Lake Pontchartrain,
21 and essentially it sets in a bowl below sea level so that
22 if we lose the integrity of the levees there, we lose the
23 bowl.

24 --o0o--

25 PROFESSOR BEA: Well, this is what New Orleans

1 looks like today. Essentially, due the things like
2 subsidence and destruction of the wetlands, chiefly due to
3 channeling the Mississippi River out to the Gulf of
4 Mexico, New Orleans has become a seaport and is on the
5 open sea.

6 --o0o--

7 PROFESSOR BEA: This is a picture taken from just
8 outside the lower ninth ward, which I was down there just
9 a couple of weeks ago. And the picture shows downtown New
10 Orleans. New Orleans is right on that water. The cypress
11 swamp are elements that we have created through, largely,
12 salt intrusion, brought in by waterways into this area.

13 --o0o--

14 PROFESSOR BEA: This is a picture of Hurricane
15 Betsy, and it was one of the most modern storms to have
16 affected this area.

17 I outlined, in the back there, our first home.
18 Both of our sons were born there, but that was the site of
19 our first home. I had to wade and swim back into that
20 home after the storm had passed.

21 I may comment that in 1954, I started my career
22 with U.S. Army Corps of Engineers. I was working for the
23 Corps in south Florida, helping to drain the Everglades.
24 Well, I left the Corps. My father didn't. He was a
25 career Corps officer. So I learned to say "yes, sir" and

1 salute pretty early in my life.

2 But anyway, we moved to New Orleans, and the first
3 time when we were here, unfortunately we lost everything.
4 The home was a total loss.

5 --o0o--

6 PROFESSOR BEA: Hurricane Katrina actually very
7 closely tracked what Hurricane Betsy had done 40 years
8 earlier.

9 As the storm crossed the tip of Florida, one of
10 the students that had worked with me at Berkeley called me
11 and said, "Bob, a big damn storm is headed across the
12 gulf."

13 Now, the reason he did that was, we had worked for
14 the offshore industry on the development of evacuation
15 procedures. There's approximately 7,000 people, 10,000
16 structures out in that Gulf of Mexico, that produce about
17 one-third of our domestic production of oil and gas.

18 So as the storm crossed Florida, and that was
19 about the 24th, but the offshore begins to evacuate the
20 fields. By the time the storm had reached where it
21 started to turn red, along its path there, the onshore
22 fields were completely evacuated. Everything was shut
23 down by the 27th. The storm comes across the coastline
24 and enters on August 29th at 6:00 a.m.

25 I would comment that it's actually late the

1 evening of the 29th that we decided to evacuate the city
2 of New Orleans. The offshore is long gone.

3 --o0o--

4 PROFESSOR BEA: This is a satellite picture of the
5 flood that filled the bowl. And I have outlined here for
6 you, in red, some of the breaches.

7 --o0o--

8 PROFESSOR BEA: The 17th Street is probably one of
9 the most photographed and intensely studied breaches in
10 recent history. Water did go underneath the sheet piling
11 and, in fact, neighbors have reported wet spots and sand
12 boils, such as I heard when I was back in the audience
13 today. But we had sort of normalized those things out of
14 our attention.

15 The water underlines that sheet piling, the
16 underlying levee, and the water opens up the concrete
17 flood wall that had been constructed on top of it, and we
18 begin to fill the bowl.

19 --o0o--

20 PROFESSOR BEA: This is a picture of the 17th
21 Street canal taken the morning of the failure. You can
22 tell, with that prevented opening in the wall, something's
23 not working. And indeed, the levee wall pushes back into
24 the homes, and that's where a good deal of the water that
25 floods New Orleans comes from. That's the first big

1 opening.

2 --o0o--

3 PROFESSOR BEA: My colleague, Ray Seed, is shown
4 over here to the right, in the blue, with his head down
5 and looking at the ground. And I think that's probably
6 because Ray, like me, to the right -- I'm kind of the tall
7 one with a white shirt on -- both of us are crying.

8 But water came over this wall, and we learned that
9 the flood walls were not designed for over-dumping. It
10 eroded behind the wall and the wall falls into the hole.

11 --o0o--

12 PROFESSOR BEA: We found vast stretches of levees
13 that protected the St. Bernard Parish, not armored. This
14 shows one of the critical stretches out on the Mississippi
15 River gulf outlet, that as Colonel Wagner put it, with
16 U.S. Army Corps of Engineers, it looked like a
17 battlefield.

18 Water attacked, essentially, the sand core levee,
19 and the rest was a miserable flooding history.

20 --o0o--

21 PROFESSOR BEA: This is a picture taken just
22 outside of the Orleans canal. This is a drainage canal
23 that didn't fail. And the question that I had was, why
24 not? So we went to the pump station, which is to the left
25 of the picture. And I started talking with the old pump

1 station operater. He and I got along like a house afire.

2 And I said, "Why didn't we have failures here?"

3 He said, "Oh, it's easy, Bob, and I can teach
4 you."

5 He takes me by the hand and on the side, and he
6 says, "Well, it couldn't fail because the water couldn't
7 get up." There's a gap there where that flood wall stops.
8 It drops about 5 feet to the earth levee, drops another
9 3 feet to that concrete surface underneath the overpass,
10 and the water was flowing through there. So we could
11 never hold back water with that system. It was
12 pervasively flawed.

13 This is a picture of flooding of New Orleans. And
14 you've seen lots of pictures of the misery that's buried
15 down in that deep water. This is a picture constructed by
16 the U.S. Army Corps of Engineers of the flooding that
17 would have happened if those levee had not breached.

18 The way we come to understand this is, if
19 everything worked, as we hoped it would work, we would
20 have had some missing shingles, broken windows, a few
21 soggy carpets, but not the greatest catastrophe involving
22 an engineered system in the history of the United States.

23 Some, approximately, 2,000 lives were lost. By
24 our total -- and it's difficult to get a total of total
25 cost that this will be, both direct and indirect, short

1 term and long term -- this will exceed 500 billion U.S.
2 dollars in cost.

3 --o0o--

4 PROFESSOR BEA: We spent a lot of time
5 questioning, why did this flood protection system fail?
6 This is not a simple thing to do. All of us carry biases,
7 and we had to be careful to help neutralize those biases.
8 We had to examine in depth, really, what was
9 happening. And all summer -- I'll share with you some of
10 the key things that we learned.

11 --o0o--

12 PROFESSOR BEA: The first thing is, we failed in
13 foresight. We ignored many, many early warning signs, and
14 we failed to take adequate protections and precautions.
15 In the period between 1965 and 2005, 40 years almost to
16 the day, we had seen all of these early warning signs and
17 we had not taken action.

18 --o0o--

19 PROFESSOR BEA: Next, we failed in organization.
20 We developed ineffective working structures and processes.
21 But it defied description, much less capture on paper.

22 --o0o--

23 PROFESSOR BEA: We failed in resource allocation.
24 We didn't have the right stuff in the right amounts in the
25 right places at the right times.

1 --o0o--

2 PROFESSOR BEA: We failed in trade-offs. We
3 didn't choose things wisely. We traded the wrong things
4 in the wrong ways for the wrong reasons and at the wrong
5 times. We have to watch compromise.

6 --o0o--

7 PROFESSOR BEA: We failed in management. We
8 weren't on time. Four years after we started, we were
9 still struggling to complete that system.

10 We weren't on budget. It was a factor approaching
11 ten to a hundred over what we thought it was when we
12 started.

13 And in the end, we didn't have any happy
14 customers.

15 --o0o--

16 PROFESSOR BEA: We failed in diligence. We didn't
17 use time wisely. 40 years after we started, we had an
18 incomplete, deficient and defective protection system.

19 --o0o--

20 PROFESSOR BEA: We failed in synthesis. And I
21 heard that being talked about with the Three Rivers. We
22 didn't have a coherent and compatible system. We had a
23 lot of disjointed pieces that didn't work as they should.

24 And by the way, your failures, many, many times at
25 the interface between otherwise okay pieces. So you have

1 to watch those dam joints.

2 --o0o--

3 PROFESSOR BEA: The risk assessment and management
4 was not okay. We underestimated uncertainties. We
5 underestimated consequences, costs, and benefits. We
6 failed to manage and we were managed.

7 --o0o--

8 PROFESSOR BEA: In summary, this failure happened
9 in kind of a straightforward way. It happened because a
10 severe hurricane tested and defeated a deeply flawed
11 protection system, developed by an equally deeply flawed
12 and deficient technology delivery system.

13 The experiences brought me to the understanding,
14 there are no natural disasters. There are natural
15 hazards. There's lots of hubris. You combine the two and
16 you will have disaster.

17 --o0o--

18 PROFESSOR BEA: Now, on to the technology delivery
19 system, this is something that we struggled to understand.
20 The technology delivery system has four plainly important
21 components. The first component is the public. Those are
22 the people that we serve. The second is the government,
23 of, by, and for the people, at all else.

24 The third, and of crucial importance, is industry.
25 They provide the fuel that makes this technology delivery

1 system engine run.

2 And there's nature who stands patiently by, hoping
3 that we'll make good choices.

4 The technology delivery system has inputs. Two of
5 the most important are values or beliefs. And next of
6 course, it's important, is capital and monetary resources.
7 And that's human capital as well as monetary ones.

8 Those inputs go into that technology delivery
9 system, where we worry about exit velocities and sheer
10 strengths, and the outputs, we hope, are desirable
11 adequate flood protection for people and the environment.
12 But sometimes they are undesirable. And in this case, we
13 won [sic] that lottery; we got an undesirable outcome.

14 --o0o--

15 PROFESSOR BEA: Our key premise that we've had
16 since May 22nd, 2006, in going forward, is that before you
17 can fix a flood protection system, you would have to fix
18 the technology delivery system. It must be fixed before a
19 reliable long-term flood protection system can be
20 realized.

21 --o0o--

22 PROFESSOR BEA: The way that we brought it
23 forward, in fact, in a room very similar to this, the
24 night of May 22nd, to the legislature in Louisiana, was to
25 say, "You need to form a Louisiana flood protection

1 authority." They didn't have an authority that had the
2 responsibility to keep water friendly.

3 We said, "You need to unite with U.S. Army Corps
4 of Engineers, our colleagues, in accomplishing these
5 things. We need to involve the public in an active and
6 engaging way."

7 Tom Foley is behind me this afternoon,
8 representing the Concerned Citizens for Responsible
9 Growth. We've reached out to the public in many
10 dimensions.

11 You have to involve industry. That's where I came
12 from. I was in an industry 36 years before I joined the
13 faculty at Berkeley.

14 And they're monied; they're massive. They've got
15 resources and knowledge that can be employed. The secret
16 is in that combination of starting with a good concept,
17 translating it through design, through construction,
18 operation, and maintenance.

19 And I think that's what my mom and dad must have
20 done, because that's why I'm here today.

21 --o0o--

22 PROFESSOR BEA: The next thing that we are urging
23 is to employ advanced risk assessment and management
24 processes.

25 I spent perhaps four decades learning what those

1 words mean, and I can tell you today, my knowledge of what
2 they mean is very different than when I started. The
3 first thing that needs to do is to include high
4 reliability organizations. These are unique
5 organizations; they do exist. And they need to be working
6 with integrated proactive, get ahead of it, reactive,
7 understand your mistakes, and don't repeat them too
8 frequently; and interactive, which means you can't ever
9 let your guard down.

10 --o0o--

11 PROFESSOR BEA: I spent a year in the Netherlands,
12 thanks to Royal Dutch/Shell. That was my employer for the
13 period of time, 20 years, after I left the U.S. Army Corps
14 of engineers. I got to know the Dutch engineers very
15 well.

16 I got to know their sad history of the 1953 North
17 Sea storm that almost destroyed the country. Today,
18 Netherlands has a very, very impressive flood protection,
19 flood-friendly, water-friendly system, that prevents
20 protection, that has reliability levels on the order of 5
21 to 10 thousand years. I try to choose those words pretty
22 carefully, because 5 to 10 thousand years is a long time.

23 New Orleans, as we best know it today, and that
24 includes the U.S. Army Corps of Engineers is somewhere in
25 the range of 50- to 100-year protection. One might

1 question.

2 --o0o--

3 PROFESSOR BEA: Now, one of the trips -- I've
4 invested in some, personally, 3,800 hours in the New
5 Orleans mess. I came back from one of those trips and
6 presented a problem to a class that I teach dealing with
7 reliability of engineering systems.

8 And I said, "Well, it's your job to tell me how to
9 protect that bowl of New Orleans."

10 So the class went away and came back with what I
11 called a constructed works engineering approach. Some
12 might call it -- some of my colleagues called it "brute
13 force and ignorance."

14 At the end of it, we came to the conclusion that
15 it wasn't sustainable. It wouldn't be something that the
16 American public would pay for now, certainly not over a
17 hundred or more years of its lifetime.

18 So I sent the class away and said, "Let's start
19 thinking more perceptively." They came back with a
20 wonderful concept, and it was to unite the component and
21 that technology delivery system, that's the earth, and
22 reestablish and employ the natural defenses that we had
23 steadily eroded and destroyed.

24 We could then use those natural defenses,
25 enhancing environment, supplement them as required with

1 engineering works, slightly higher levees, certainly not
2 60-foot monsters, on some flood gates, and end up with a
3 system that was environmentally pleasing, improved the
4 quality of life, and it was something that we would
5 forward and maintain.

6 --o0o--

7 PROFESSOR BEA: And in the end, I think we came to
8 the conclusion that it's not a question of can we provide
9 acceptable, but desirable long-term flood protection.
10 It's a question of, will we?

11 --o0o--

12 PROFESSOR BEA: Now, one of the reasons that we
13 went on this adventure -- and it was a marvelous team of
14 people including my colleague, Ray Seed; a man that's just
15 down the street, Les Harder, with the Department of Water
16 Resources. So we had a pretty strong team. We didn't
17 have much money, but we had a lot of good people.

18 We said, "Well, one of the reasons we're doing
19 this is to bring these lessons back to our home and to
20 learn how to better struggle with this problem concerning
21 water. So we said, "Well, we know we've got a multipart
22 challenge," and you know that challenge even better than I
23 do, I'm sure. But it's to protect people, property,
24 productivity, water, and the environment.

25 And that water needs to have an element for

1 protection, because when water gets out of the control and
2 mad, we pay. It has to have water distribution that makes
3 sense for the vast economy of this state. And it has to
4 have water quality, so that the quality of life is
5 enhanced and not degraded.

6 --o0o--

7 PROFESSOR BEA: We started to look at the history.
8 And the pictures are the same. Instead of African
9 Americans digging those canals and building the levees, of
10 course we have Chinese and others as well.

11 So for the background behind, what I call, this
12 150-year old leaky boat is the same.

13 --o0o--

14 PROFESSOR BEA: We've had the early warning signs.
15 This is a plot from 1900 through 2001 of the historical
16 levee failures that we've had in that system. There are
17 clusters, and those clusters are associated with, we'll
18 call it, severe conditions -- having water down the river,
19 but of course, as well, we've got a number of other things
20 happening within that massive system.

21 --o0o--

22 PROFESSOR BEA: Because of my risk assessment and
23 analysis and management background, I'm very sensitive to
24 this plot. It shows the level of protection in years. It
25 shows it for various areas here in the United States.

1 look forward to that blue expanding very, very
2 dramatically, and with it, the consequences.

3 And this is the summary of the work that I've done
4 in the last two decades since coming to Berkeley.

5 One of the things that I became a fan of are big
6 accidents and catastrophes. I've become, what you might
7 call, an ambulance chaser. And in fact, I spent several
8 years working for colleagues in NASA and it's the reason
9 for the Columbia that's shown in the background. And I
10 served on the Columbia accident information.

11 600 well-documented accidents involving engineered
12 system, says, well, there's two ways we can generally
13 start to think about it. One to the left there says
14 "intrinsic." That means natural variabilities and
15 uncertainties with modeling. Natural variabilities like
16 floods. Modeling like, well, the strength of that levee.

17 "Extrinsic" are human organizational performance,
18 uncertainties and knowledge uncertainties. How we acquire
19 and use the things that we would call knowledge.

20 Well, the sad story is, out of those 600, it's not
21 the natural and modeling things that are getting us. It's
22 that 80 percent tied up fundamentally in people. Eighty
23 percent of it shows up in operations and maintenance. And
24 that's not to say that people that operate and maintain
25 are bad people or doing bad things. Rather, they are

1 there for the long period. And certainly, since this is
2 my 71st year as a person, I can tell you, that long-term
3 exposure gets you down, so that we know that operations
4 and maintenance bring forward a lot of flaws.

5 And one of the things that we came to learn from
6 the 600 was, more than 60 percent of those flaws are
7 imbedded back in concept and design. And certainly, some
8 of the flaws in my body show up because of my appearance.
9 So we know that these early life cycle phases are
10 extremely important. And in the case of our flood
11 protection system, this is virtually a 150-year old boat
12 that we are attempting to put to sea.

13 --o0o--

14 PROFESSOR BEA: Well, continuing on with that 600
15 well-documented accidents, we come to follow very closely
16 in the work that you and your colleagues are doing here,
17 on understanding risk. Some very, very good studies going
18 on, on that intrinsic 20 percent side of the problem.

19 But the thing that is of major concern is a lack
20 of the focusing on the extrinsic. And of course, being an
21 engineer, I can kind of, sort of, understand that. As is
22 one of my colleagues who as come to joke with me, he says,
23 "Well, Bob, engineers want to believe the plans, not
24 inhabit it." We find people difficult to deal with. We
25 find them even more difficult to put into our equations

1 and our models. And hence, there's a reason why we
2 frequently will develop that blind side.

3 --o0o--

4 PROFESSOR BEA: Early warning signs abound all
5 around us that all is not okay. I've had student teams
6 for several years and our students in our university
7 system are, absolutely, I think a blessing to the end of
8 my career. But they don't know what questions not to ask.
9 So they go around saying, "Well, what are those cracks in
10 the roads doing there." Why are those wet spots there?"

11 And they ultimately drill down and say, "Well,
12 what water is coming over from the Sacramento river.
13 Those cracks are deformations developing in our protective
14 levees."

15 --o0o--

16 PROFESSOR BEA: Well, as several of the people
17 here this afternoon are going to explain in more detail,
18 we're also confronted with change. Water levels are
19 rising. Storms are becoming more intense. The signs are
20 evidence.

21 And following the precautionary principle, when we
22 cannot decide if it's right or not right, you take the
23 conservative course and protect yourself.

24 --o0o--

25 PROFESSOR BEA: We also know it's been a long time

1 since we've had a strong earthquake in this area. I moved
2 out of hurricane country in the South, to the earthquake
3 country in the West. So no matter where you are, you face
4 these natural hazards.

5 And so we know that as time goes on, strain is
6 building up in the ground and we can expect to see that
7 released. And it could be released and destroyed, a good
8 part of our protective system.

9 --o0o--

10 PROFESSOR BEA: Well, I guess the choices are
11 pretty clear. I spent some time today with Jay Lund at
12 Davis, talking about fortress delta and natural delta,
13 beginning to understand how to approach the problem.

14 And at least, as two old men sitting there, and
15 we're both sailors, so we got to it pretty quick,
16 concluded that the fortress delta cannot be sustained,
17 just as we learned, you couldn't sustain that system, I
18 mentioned earlier, for New Orleans. So we need to find
19 out how to strengthen this partnership with nature.

20 Yes, we can improve flood protection and, yes,
21 there are slurry walls, and there are all kinds of tricks
22 of engineers about how to help bolster the defenses.

23 One of the things I continually remind myself of,
24 is this is a 150-year-old boat that I'm trying to put out
25 in the open ocean. And so that boat, with all of its

1 flaws and defects and all of its strengths, has to be able
2 to withstand some big storms, and we should be concerned.

3 --o0o--

4 PROFESSOR BEA: One of the most important things
5 we learned in New Orleans is, manage protective area
6 growth. If you build a levee, you can expect commercial
7 development soon to follow. Whether or not that levee is
8 actually sufficient to provide protection for that
9 development remains a moot question.

10 And I think we're learning from countries, like
11 the Netherlands, that you should only populate what you
12 can adequately protect.

13 --o0o--

14 PROFESSOR BEA: I guess the end message we bring
15 back here is to develop a coalition back to the technology
16 delivery system that would, in fact, have a California
17 flood protection authority.

18 I was counseling with Jay about, well, who in
19 California is responsible for flood protection and he
20 answered "everybody and nobody." But at the U.S. Army
21 Corps of Engineers, there are colleagues that have
22 knowledge and capability that has to be employed in a
23 cooperative, collaborative way. We need the regional
24 flood protection authorities that are working in concert.
25 We need to engage that public. We need to engage that

1 industry. And we need to keep our focus on that life
2 cycle from concept, design, construction, operation, and
3 maintenance.

4 --o0o--

5 PROFESSOR BEA: Well, I guess the other choice,
6 and I've used it sometimes in my life, is hope. And I can
7 tell you, after 54 years now of engineering and water,
8 hope is not an effective strategy to keep water friendly.

9 --o0o--

10 PROFESSOR BEA: The clock is ticking, and the
11 question is, what will we do?

12 Thank you.

13 PRESIDENT CARTER: Thank you very much, Mr. Bea.

14 Do we have some questions?

15 VICE PRESIDENT HODGKINS: Is the engineered flood
16 control system in New Orleans by and large something
17 that's been developed since 1964, '65 hurricane?

18 PROFESSOR BEA: No. Unfortunately, it got
19 started, really, in about 1850. And that's about the same
20 date we started.

21 VICE PRESIDENT HODGKINS: Yes, it is. So that
22 levee is about 150 years old too.

23 PROFESSOR BEA: That's why I refer to it as
24 150-year-old boat that we are trying to put to sea. It's
25 got some new stuff on it, the new steering wheel, but the

1 hulls, still the same.

2 BOARD MEMBER RIE: I just wanted to say, Professor
3 Bea, thank you very much for taking your time and driving
4 up to Sacramento today to give us this presentation. And
5 we've heard a lot about the Center for Catastrophic Risk
6 Management through our previous colleague, Cheryl
7 Bly-Chester. So I know you guys do a lot of good work for
8 the nation and the world. So we appreciate that.

9 Thank you.

10 PROFESSOR BEA: Thank you for saying those words.

11 SECRETARY DOHERTY: Thank you.

12 PRESIDENT CARTER: Any other comments?

13 BOARD MEMBER BURROUGHS: I ditto all the other
14 positive comments. Thank you.

15 Do you have any other comments that you would like
16 to share with us on what you have heard this morning?

17 PROFESSOR BEA: Well, I sat back there and
18 marveled at your patience. And I also sat back there and
19 marveled -- in fact, it gives me goosebumps at the
20 strength of the American political process.

21 So I can only say, be aware of that clock. The
22 clock is ticking. And my concern is we're not going to
23 beat the clock. That if we don't take aggressive
24 effective action quickly -- and that's not meaning you are
25 stupid -- it's going to beat us. I sit back and watch

1 things happening. We're, for example, building homes in
2 areas, I think, that I wouldn't do it if I were doing it
3 all again. So I think it's a issue of managing the most
4 important resource we have, and that's time.

5 And I can only say, Godspeed. We need you to help
6 us do that.

7 PRESIDENT CARTER: Thank you.

8 Dr. Bea, one thing that you said which is a
9 constant sort of discomfort for this Board member is that
10 if we build stronger levees, people will build homes
11 behind them. And this Board is trying to improve the
12 flood protection. And our job is essentially to build
13 stronger levees or better levees or there are other
14 methods to do that.

15 But we are caught in this squirrel cage of trying
16 to improve the flood control system and to protect the
17 people, the existing residents, that are there. And at
18 the same time, there are people that are rushing to build
19 behind those levees.

20 It's just a comment. It's not a very comfortable
21 position to be in. And I don't know the solution to that,
22 particularly given that this Board doesn't have really
23 land use or development authority.

24 In your models, you have your technology delivery
25 model. You talk about the various players, you talk about

1 the process.

2 Any thoughts or comments in regard to that
3 particular dilemma that we're faced with?

4 PROFESSOR BEA: Well, like you, I'm frustrated
5 too. I don't think there are any easy answers or you
6 wouldn't even need to have me here. You would already be
7 on that trail.

8 But I think we've learned that collaboration goes
9 a long way. The other thing I think we've learned is, I
10 struck on it, values and beliefs trump technology. So
11 that if, in some way, we are able to affect the values and
12 beliefs of the public that needs that protection in the
13 industry that must have that protection, then we've got a
14 chance to begin building, what I call, a family.

15 Recently I attended a town hall meeting in New
16 Orleans, and I was, as usual, kind of struggling with what
17 I was going to tell those people that could make their
18 lives a little bit better and not come off sounding like
19 an outside, California professor.

20 And I got up and I said, "Family first, levees
21 second." And that was my way of saying, pull your family
22 together, get rid of the dysfunctionality that you can,
23 and once you have that family together, the levees will
24 follow, and they will follow correctly.

25 But if you try and set up the levees with that

1 dysfunctional family, meaning the public, the industry,
2 and the government, it won't work. Family first. Flood
3 protection second.

4 PRESIDENT CARTER: Those are words of wisdom.
5 Any other questions or comments?

6 BOARD MEMBER BURROUGHS: Two more things, if you
7 could comment on, and it's just in a general form.

8 But do you have any studies that, you know, of in
9 regards to slurry walls or cutoff walls for protection?

10 PROFESSOR BEA: Yes. Those things are easy.

11 BOARD MEMBER BURROUGHS: And the second one would
12 be talking about managing as part of the discussion on --
13 if you put up a level of protection that people have
14 confidence in, then the housing industry to the
15 development comes in right behind. And we've had several
16 issues of discussion on how much room we need to have
17 between levee and housing.

18 So if you could just give us a comment on those
19 two things. Thank you.

20 PROFESSOR BEA: One of the pictures I showed of
21 the 17th Street canal, the reason I keep that picture in
22 there, at the very center of the area that everything we
23 know as of this minute triggered that breach was an
24 overblown oak tree. The overblown oak tree was at the toe
25 of the levee. The big winds in that storm attacked that

1 tree, very early on and blew it over. It served to uncork
2 the bottle. And once the cork had been removed from the
3 bottom, then the water that was building up in the canal
4 could begin to undermine that levee.

5 So the answer, if you have something that can
6 disturb the strength, reduce the strength, degrade the
7 strength of the protective structure and you are within
8 that zone, I would say, get it out of the zone.

9 Today, the Army Corps of Engineers is going
10 through the entire New Orleans area, removing all of the
11 trees that the regulatory authority said officially, in
12 the press, "We do not allow trees to grow on our levees."

13 Well, they are dotted with trees. So we are going
14 through now and cutting out, creating these protective
15 spaces so that we don't degrade our own protection.

16 SECRETARY DOHERTY: Now you answered her, "That
17 was easy." But you still didn't address the slurry wall.

18 PROFESSOR BEA: Well, what I mean by "easy," the
19 technology for slurry walls has been developing for four
20 decades. Some of the people that have really done it --
21 and I used this in my work in the Arctic -- are the
22 Japanese. They know how to mix cement into soil. It's
23 called a deep cement mixing technique. The technology is
24 out there. You just have to mobilize the people that know
25 and understand that technology, and say, "Well these are

1 the kinds of things we want to accomplish," so we know how
2 to do those things.

3 SECRETARY DOHERTY: Well, yes, to make the slurry
4 wall. But is the slurry wall effective in maintaining the
5 levee and keeping out water? That's what I want to know.

6 PROFESSOR BEA: Excellent question. That's the
7 question that keeps on coming. The answer to that says,
8 well, depends on what you do with that slurry wall.

9 I'm in a big, kind of, I call it a debate. It's a
10 test, actually, in New Orleans, where we built a new
11 equivalent of a slurry wall and we put the bottom of it,
12 from everything we know, above the bottom of the soft
13 layers of the soil that can conduct water under the wall.

14 Now, the slurry wall, in this case, given that the
15 water can get to that porous layer under its bottom will
16 act to undermine the levee in the flood wall. It will
17 destroy it.

18 So a good way to put it, the devil's in the
19 details. If we put the wall sufficiently deep so that we
20 seal off the potential paths of water, like fixing holes
21 in a boat, then it will work. But if you don't, and you
22 try and cut corners, you can expect to get cut. It's
23 really common sense, but common sense is not common.

24 PRESIDENT CARTER: Professor Bea, thank you very,
25 very much. We are very grateful for your time and for

1 joining us and enlighting us this afternoon.

2 PROFESSOR BEA: My pleasure.

3 BOARD MEMBER BURROUGHS: I would like to know if
4 you would leave us a business card for the Board. Thank
5 you.

6 PROFESSOR BEA: Of course.

7 PRESIDENT CARTER: Okay. Ladies and gentlemen,
8 we'll -- let's move on to Item 11. As you recall, we were
9 going to be doing Item 11.B first, Sea Level and Flood
10 Stage Planning Targets.

11 Mr. Roos?

12 MR. ROOS: Thank you. I'm happy to be here. I'm
13 going to start out by giving some general background on
14 global warming climate change, and then some generalized
15 water related impacts. And then John Andrew is going to
16 talk more about what DWR has done, the studies we've done,
17 our goals, and what we are planning to do. So it's a
18 two-part presentation.

19 The first point, I think, is that it's more than
20 carbon dioxide. What I've shown here is a proportion of
21 the greenhouse gases; carbon dioxide is the majority. But
22 there's also other gases that are important, like methane,
23 17 percent; nitrous oxide, 5; halocarbons, and you might
24 think of these like the freons, like the air-conditioning
25 agents; and then tropospheric ozone, or maybe you think of

1 that as smog.

2 And on the left side -- I hope you can read it
3 okay -- is the relative global warming potential: carbon
4 dioxide, being one per molecule, then methane, 23 times as
5 effective per molecule. You get down to some of the
6 halocarbons go over 10,000 times. The new auto
7 refrigerant is called R-134A, that we fairly recently
8 substituted for the ozone depleting freon, is about 1300.
9 So that one is possibly going to be replacing it. It
10 takes care of the problem with the ozone in it, but now
11 it's got a global warming potential.

12 The other thing to remember, of course, is the
13 world does have a greenhouse blanket. It always has. And
14 the major constituent of that is water vapor. If we
15 didn't have the greenhouse blanket, we would be looking at
16 temperatures near zero Farenheit instead of the average of
17 about 60 degrees that we have. So water vapor is the
18 primary one. Carbon dioxide is about a quarter.

19 And those other ones are rather recent additions,
20 and those percentages can change a little bit depending
21 who you talk to.

22 --oOo--

23 MR. ROOS: Okay. Here's an estimate from the Oak
24 Ridge folks on the carbon dioxide emission. We've just
25 gone back to the carbon dioxide parameter.

1 The history of it, of the world, we can see a
2 fairly steady build up, with time. The last year they had
3 was 2003, that they worked out all of the numbers on.

4 U.S.A. is about 23 percent right now. I've also
5 shown China, which is rapidly rising; and Japan, which is
6 pretty steady. Now, all of this stuff is going into the
7 atmosphere, and it is making changes.

8 --o0o--

9 MR. ROOS: Here's the record of measurements.
10 Carbon dioxide in Maunaloa, Hawaii, is up on top of a
11 mountain, about as far as you can be from an industry
12 influence. And what you see there is a fairly steady
13 rise, maybe about 1.7 parts per million per year,
14 recently.

15 The other thing that's of interest is the annual
16 cycle. It dips during the northern hemisphere summer. It
17 climbs during the northern hemisphere winter. And that's
18 the result of the vegetation taking some of it up.

19 Looking back at the chart on the CO2 production,
20 maybe about half of it is showing up as an increase in
21 atmospheric carbon dioxide. The rest of it is being
22 picked up somewhere, mostly in the ocean.

23 Let's look a little bit at temperature. This
24 chart is from the Western Region Climate Center, which you
25 can see is in Fahrenheit. Since about 1980, looks like

1 it's gone up about a degree or so. Actually, until about
2 1980, it almost looked like it was dropping a little bit.
3 So there does seem to be some changes.

4 --o0o--

5 MR. ROOS: This is another chart from our Farmers
6 Day Climatologist Jim Goodridge, who's been pretty active
7 still. And what he outlines here, using stations that he
8 feels are reliable, is the California temperatures for the
9 urban counties. Those over a million, that's the upper
10 chart. And down in the lower part are the rural counties,
11 less than a hundred thousand population in 1990.

12 And what you see here first, is you get a much
13 bigger rise in the urban counties. This is the so-called
14 urban heat island effect. And that's been quite an
15 argument as to how much of this rise is real and how much
16 is due to all of our expanding cities and industry. But
17 even looking here at the rural ones, seems like there's a
18 slight uptick there, recently.

19 --o0o--

20 MR. ROOS: He did the same on precipitation using,
21 I think, about 90 stations. And maybe there's a very
22 slight upward trend. But really, not a whole lot of
23 change in measured precipitation that we can tell so far.

24 --o0o--

25 MR. ROOS: This is our Sacramento river index, the

1 total record that we have since 1906. It's color-coded:
2 blue for wet years, red being the drought years, the dry
3 years. More recently, you can see the '87 through '92
4 drought. And then we had five wet years in a row. We're
5 kind of wondering where this year fits, showing the May 1
6 forecast, over there on the right, on that striped bar.
7 So it's not the driest; it's about 15 percent level as far
8 as being the driest. About 15 percent of the years have
9 been dryer.

10 If you were to do the same thing on the San
11 Joaquin, it would be a little drier; about 10 percent
12 level.

13 I'm going to talk about some projections. The
14 IPCC standard for the Intergovernmental Panel on Climate
15 Change. This is a team of scientists who were put
16 together under the World Meteorological Organization and
17 the United Nations Environmental Program.

18 They made their first assessment about 1990; the
19 second one about '95; the third came out in 2001. And
20 then this year, they are just putting out the
21 fourth assessment.

22 So looking at the 2001 assessment, they said,
23 well, global temperature by year 2100, the end of this
24 century, would probably rise from 1.4 to 5.8 degrees
25 Celsius. That's about 2 to 10 degrees Fahrenheit.

1 Sea level rise, from about three-tenths to 3 feet
2 at that range. And the ranges are partly due to
3 assumptions on economic development. We're aware of the
4 amount of greenhouse gases that are being generated as
5 well as we don't reliably know, even if you double it, how
6 much does that do? There's some variability there.

7 On precipitation, they said some increase in high
8 latitudes -- by that, I mean basically north of the
9 Canadian border -- are otherwise uncertain. And extreme
10 flood events are more likely.

11 Now, in February they came out with a summary of
12 the new assessment. And these are the numbers that are in
13 there. Temperature, narrowed the range a little bit.
14 It's 1.8 to 4 degrees Celsius. Sea level rise, and I
15 can't quite understand the precision on this thing, .18 to
16 .5 meters, or roughly six-tenths to 1.9 feet, by 2100.

17 A little bit more descriptive on precipitation.
18 It's uncertain, but it will likely increase at higher
19 latitudes, as I said before, near the equator but less in
20 the subtropics. So it could be that Southern California
21 and the Colorado River Basin will be drier.

22 And they did have one footnote on the sea level
23 rise, saying that if Greenland ice melts, rates increase
24 beyond the recent rates. Might be another one- to
25 two-tenths of a meter. And then extreme flood events more

1 likely.

2 --o0o--

3 MR. ROOS: I can back up to the previous one if
4 you want to see the changes, but not really a great amount
5 of changes.

6 --o0o--

7 MR. ROOS: This chart -- these two charts come
8 from Dettinger. What he did was take about 20 global
9 climate files and their projections and compared the
10 traces. The temperature is the one on the left. And you
11 can see quite a spread, roughly 2 to 87 or 88 degrees.

12 But the one thing to note is, there's uncertainty,
13 but they are all up; so all go warmer.

14 Then you get down to the lower right, you got the
15 precipitation. And this is for northern California, by
16 the way; it is for our area. And you see a much bigger
17 spread. A lot of uncertainty. A few of them are quite
18 wet. It kind of looks like the majorities start to be
19 just a little bit drier for us up to 2100. But not a high
20 confidence either way on that one.

21 The change, if you go back and look at the
22 temperatures, starts to pull away from the background,
23 about 1980.

24 --o0o--

25 MR. ROOS: I have looked at the potential effects

1 on California water resources and reduced it to five major
2 items. First is reduce snow pack with runoff pattern
3 shifts. So we would see more runoff now in the winter,
4 less in the spring and early summer, because you have less
5 snow.

6 Sea level rise would be quite a problem for the
7 Delta levee stability and for salinity intrusion for the
8 water projects. Possibly bigger floods and more intense
9 rainfall events.

10 Some increase in water use for agriculture and
11 urban landscape usage.

12 And then the warmer river temperatures could be
13 affecting the salmon and steelhead. That is, the cold
14 water fish. So that summarizes what I think would be the
15 five major water effects.

16 --o0o--

17 MR. ROOS: Going back to that snowpack change,
18 this is just a temperature-related thing. You have warmer
19 temperatures, you have higher snow levels during winter
20 storms. And it works out to about 500 feet per degree
21 Celsius.

22 Precipitation is about the same, and we're not
23 sure of that. You can expect more winter runoff in
24 smaller spring and early summer snowmelt piles. The other
25 thing we noted is that the northern Sierra would be

1 affected more than a higher elevation southern Sierra
2 snowpack.

3 --o0o--

4 MR. ROOS: This chart came out of the California
5 Water Plan Bulletin 160. It's from work by Knowles.

6 Over on the left, is the 2030. Then they have a
7 2060. SWE stands for snow water equivalent. And 2090 on
8 the right.

9 And the blue means 100 percent of the historical
10 snow pack. The red means down to zero. Now, what you see
11 is not very much of a change in 2030; but 2060, you start
12 to see quite a bit more red and yellow; and 2090 shows,
13 you know, a fair amount of blue in the southern Sierra but
14 not too much in the north. So pictorially, that may give
15 you some idea.

16 --o0o--

17 MR. ROOS: We've looked at the runoff patterns,
18 because it seems like one of the first things you would
19 look at would be a fraction or the portion of water year
20 runoff coming off during the snow melt season, which
21 historically, has been about 40 percent of the Sacramento
22 River basin. And yeah, it does seem to be a decline.

23 If you just do a regression curve, it's about
24 10 percent per century. But it's a thing that's highly
25 variable. So there's a lot of uncertainty of how much

1 that would be.

2 This is the San Joaquin River basin, Stanislaus
3 through San Joaquin River. And there, this is a
4 predominant snow melt system in the south. And so it's
5 not as much. It's a flatter slope. That's about
6 7 percent for the century. And again, the average is more
7 like about two-thirds of the runoff. Historically, it's
8 come from snow melt.

9 --o0o--

10 MR. ROOS: Here's some numerical numbers. Can you
11 read the screen okay or not? Okay. Good.

12 The Knowles and Cayan is the first one. That sort
13 of goes with the charts. We had a NAS study, by Hayhoe,
14 and it included some of the same people as Knowles as
15 well. And then the 2040 one, the temperature rise shows
16 1.3 to 2 degrees and 26 to 40 percent. Part of the reason
17 for the variability is, some of the models have less
18 precipitation and a few have more.

19 And then by 2080 or so, it showed up possibly
20 90 percent. And the most recent one is a white paper that
21 was done for the State Climate Team by Cayan and other
22 researchers.

23 But there, if you look to 2005 to '34, they show a
24 6 to 29 reduction with a half to one and a half degrees.
25 By the time you get to 2050, you are looking at .8 to 2.3

1 degrees with a 12 to 42 percent reduction.

2 --o0o--

3 MR. ROOS: Sea level rise. Yeah, in 2001, the
4 IPCC said it ranged from one-tenth to nine-tenths meters.

5 Historically, what we see at the Golden Gate --
6 and I will show you the chart in a moment -- is about
7 two-tenths of a meter per century. And of course, from a
8 water standpoint the big impacts will be in the Delta.

9 Some increase in salinity intrusion is due to
10 higher ocean levels. That is, deeper channels. And a
11 longer dry season because you have less snowmelt going
12 off. It gives more time for the salt to work its way in.
13 And of course, it can be offset by increasing Delta
14 outflow, which is a cost in water.

15 Probably a more concern to us here would be the
16 more pressure that leaked out of the levees with greater
17 risks of inundation in winter floods, higher risks of
18 summer breaks. And breaks give you the possible
19 interference with export water transfer.

20 --o0o--

21 MR. ROOS: Erosion along the shore could be a
22 problem too. I don't know if that's too much concern
23 here.

24 --o0o--

25 MR. ROOS: Let's look at what happens at Antioch

1 which is a Delta pump station. Historically, you can put
2 5 feet, 6 feet. These horizontal lines are pulled apart.
3 So the one-in-a-hundred-year event would be historically,
4 you know, probably about six and a half feet above sea
5 level.

6 If you had a foot rise in ocean level and all the
7 other factors the same, well, it just moves over to the
8 left. And so you reach the same stage, but it becomes a
9 one-in-ten-year, so it's ten times more likely to reach
10 that very high stage.

11 --o0o--

12 MR. ROOS: Here is the tide record at the Golden
13 Gate. And the blue represents the average annual amount,
14 and there's a lot of variability.

15 1983 was the biggest El Nino year. Also, our
16 wettest water year. A lot of storm activities. So that
17 one really bounced up there. And then I plotted in red
18 the 190-year mean. And I used that because it takes 18.6
19 years to go through a complete water cycle.

20 So maybe that's the one to look at for an average
21 effect. And that's the one that started rising in the
22 '20s and probably shows about seven-tenths of a foot per
23 century, or two-tenths of a meter. It really, from what I
24 can see, does not seem to be accelerating, at least not so
25 far.

1 --o0o--

2 MR. ROOS: The Department did a study. And John
3 might say a little more about it. What might happen in
4 2050 for the water project exports? And the rates they
5 came up was a minus 10 to plus 2. Remember, a few of the
6 scenarios have more precipitation which can help.

7 The dry period change, which is probably very
8 important for project yield, was minus 17 to plus 5. But
9 don't forget that the base has a shortage of about
10 40 percent already. So this is on top of that.

11 I don't think this particular study really
12 adequately took care of increased salinity intrusion
13 either, because that's something we're still working on
14 modeling.

15 --o0o--

16 MR. ROOS: Okay. Possible flood increases. For
17 mountain basins, the higher snow levels during storms mean
18 more rain runoff contributing there. Storm rainfall
19 intensity tends to increase with warmer temperatures if
20 other parameters remain the same.

21 To give you some idea, 3 degrees Celsius can yield
22 about 10 percent increase in storm intensity. And there's
23 already some indication in our storm drainage design data
24 of increasing intensity of rain storms.

25 --o0o--

1 MR. ROOS: This is what we call a curve depth
2 duration frequency curve. It looks something like this.
3 This is Blue Canyon. And if you take 12 hours, say it's
4 got about a one-in-ten-year level of about 5 inches in 12
5 hours. If you go up to one in a hundred years, it's more
6 like 7 inches. So this gives you volumetrics. If you
7 want to pick your probability or return period, then you
8 can come up with your design amounts.

9 --o0o--

10 MR. ROOS: And so if these curves -- this kind of
11 data is widely used for storm drainage design. A lot of
12 different drainage-type problems. And if these things
13 turn in a little higher, then you can imagine what we once
14 thought was adequate may not be anymore.

15 --o0o--

16 MR. ROOS: I'm trying, pictorially, on this chart
17 to show what happens with this elevation change in snow
18 level.

19 Historically, the snow level might be about
20 halfway up in the basin, so that area in green is where
21 you get rainfall and rainfall runoff. If you had a warmer
22 climate with a higher snow level let's say it's a thousand
23 feet higher, now you've got the blue area added,
24 contributing direct rain runoff in the winter and that's
25 one of the reasons you can expect larger winter flood

1 sizes.

2 Even in most of our Pineapple Express storms, some
3 of the watersheds are still in the snow zone, at least
4 during part of the storm.

5 And I think you have all seen this famous American
6 River chart. This is the annual peak, three day amounts.
7 Folsom Dam was built about in the middle, 1955. And since
8 then, it seems like the floods keep getting bigger. I
9 show this in a three-day volume here because I think that
10 most accurately compares to the operation of the large
11 flood control reservoir. You take the daily charts, you
12 would have even a more striking increase.

13 --o0o--

14 MR. ROOS: And then it does have an effect on
15 water supply too, because this is the old Corps diagram,
16 not the new SAFCA one. But what I'm trying to show here
17 is our standard practice which is to hold space open in
18 the winter to catch a possible rain flood.

19 But in the spring, we relax this so that we can
20 gradually fill up with the spring snowmelt. And you know,
21 then we'll have the maximum for water supply and power and
22 other services.

23 And there are basin wetness parameters. If the
24 watershed is dry, you can store it at a higher level in
25 the early spring than you can when it's wet.

1 So if you not only get most of the runoff during
2 the winter season, you still have to maintain that flood
3 control space or maybe even a little more, and then you
4 are hoping to fill in the spring. And it's less likely to
5 have another snowpack to fill.

6 --o0o--

7 MR. ROOS: This is the one for Oroville Reservoir.
8 It's a little more complicated. Oroville is already quite
9 difficult to fill in the spring if you maintain the water
10 level. It's pretty hard to fill. It takes a really wet
11 spring to do that.

12 --o0o--

13 MR. ROOS: I mentioned water use. You know, water
14 consumption goes up about 10 percent for three degrees
15 Celsius, too, if other factors are constant. But they
16 won't be. The folks from Davis tell us that if we have a
17 higher dew point, that will reduce water use.

18 And the other thing is higher carbon dioxide
19 contents in the air does reduce some for most plants. And
20 the other thing is, if you have a warmer climate, you can
21 probably change your planning dates. So at least for
22 annual crops, you will probably see changes.

23 --o0o--

24 MR. ROOS: I will skip this one.

25 --o0o--

1 MR. ROOS: This is a chart that they drew for us
2 of the evapotranspiration. The so-called reference to
3 evapotranspiration is a plot of grass, which you can then
4 relate to other crops in determining irrigation
5 requirements.

6 The blue is the current, you know, peaking out in
7 July, as you would expect. And then if you just add air
8 temperature, you get the purple on the top. That's this
9 10 percent I was talking about. But then you throw in
10 probable higher dew points. And see, that's the absolute
11 dew point, not the relative dew point. So if you got a
12 warmer climate, your minimum temperatures will be up some,
13 so your absolute dew point is likely to come up too. So
14 that tends to reduce it a little bit.

15 Then you throw in what they call a canopy
16 resistance, but the higher carbon dioxide is the yellow
17 line. So as a matter of fact, it doesn't look like it's
18 very large.

19 I'm not quite sure how it's going to work out on
20 crops that are dormant part of the year, because you might
21 have a shorter dormancy season.

22 --oOo--

23 MR. ROOS: Another note about river temperatures.
24 We think there will be more problems for cold water fish
25 like salmon, steelhead, and trout in the warmer

1 temperatures, partly because the air temperatures are
2 warmer, partly because you don't have as big a cold water
3 pool behind those foothill reservoirs to work with.

4 And then I came across a note somewhere, the delta
5 smelt are near the top of their temperature range now,
6 which is 75 to 77 degrees. So maybe that's the problem
7 with the smelt. So there may be more than just salmon and
8 steelhead that are affected.

9 --o0o--

10 MR. ROOS: I think John will go into this a little
11 more. These are the California greenhouse gas goals. And
12 it's more than just carbon dioxide. It's a collective
13 amount of all of them.

14 When 2010 reduces to 2000-level emissions, which
15 means 11 percent below what so-called businesses use them.

16 By 2020, reduce to 1990 levels, which is about 25
17 percent reduction levels. And then 2050, reduce to
18 80 percent. We'll focus mostly on this adaptation,
19 because that's where we see the impact. I think John will
20 talk more about that.

21 --o0o--

22 MR. ROOS: That's what I have. I don't know if
23 you want to take questions of me or you want John to go
24 forward at this point. I would be happy to answer
25 questions if you have them, or try to answer them, at any

1 rate.

2 PRESIDENT CARTER: Any questions for Mr. Roos?

3 VICE PRESIDENT HODGKINS: With sea level rise, do
4 we know whether we are seeing a similar line in the
5 inland? Is it causing more sediment accumulation? Is
6 there some relationship here between velocity and water
7 depth?

8 MR. ROOS: I can't answer it for sure. There's
9 some studies that our sample district is doing on channel
10 capacity in some of the delta areas. But my sense is that
11 the amount of sedimentation that we're getting isn't going
12 to keep up with sea level rise. So you will have deeper
13 channel. I think we're probably reaching the point where
14 all the gold mining debris from back in the 1800s has
15 pretty well been swept out and it's even now being eroded
16 out of the system, in fact, out of San Pablo bay.

17 There is a lot of sediment that comes in, so some
18 of it may -- you may get some sediment building up some
19 more. But I think generally in the Delta, we'll see
20 deeper channels.

21 VICE PRESIDENT HODGKINS: Okay.

22 PRESIDENT CARTER: Any other questions?

23 BOARD MEMBER BURROUGHS: You referred to the sea
24 level rise and salinity intrusion. Could you expand a
25 little bit more on that?

1 MR. ROOS: Okay. The sea level rise, which would
2 affect the Delta -- the ocean is slowly rising and the
3 causes are twofold: One is melting ice. So far, mostly
4 temperate zone glaciers; and the other is, as the ocean
5 warms, it expands very slightly. Water doesn't expand
6 very much, but when you put it over thousands of feet of
7 ocean depth and you warm things up a degree, it does
8 expand a little bit.

9 The picture I get is, so far, about half and half,
10 half the melting ice, half from -- there's been a lot of
11 melting of the south eastern Alaska glaciers and also the
12 ones in Patagonia in South America. I think that's where
13 most of the rises come from, so far.

14 Professor Hanson or Dr. Hanson is one of the
15 warriors. He thinks that Greenland might well melt on us.
16 And if that's true, if the whole icecap melted, you would
17 probably be looking at 20 feet or so. But I don't know
18 that that could even happen in a century.

19 The IPCC report didn't buy his idea as it stands.
20 They have the footnote. Might be another one- or
21 two-tenths meters. But it does not anticipate either
22 melting of Greenland or Antarctica or at least not a
23 substantial amount.

24 BOARD MEMBER BURROUGHS: Thank you.

25 MR. ROOS: I don't know if I answered about the

1 salinity intrusion. That is partly a function of channel
2 depth. So if you have channels in the delta that are a
3 foot deeper, you say you get just a little bit more. And
4 the other factor is, we are not going to have so much snow
5 melt. There's going to be more years where you have less
6 or no uncontrolled spring snow melt, which is what pushes
7 the salt pack, and it takes some months for it to work its
8 way back into the system.

9 BOARD MEMBER BURROUGHS: Thank you.

10 PRESIDENT CARTER: Any other questions?

11 Mr. Roos, thank you very, very much for sharing
12 that information with us.

13 Let's go ahead and take a ten-minute stretch. And
14 then we will continue with Item 11.A.

15 (Thereupon a break was taken in
16 proceedings.)

17 PRESIDENT CARTER: We've got Item 11.A here, local
18 Climate Change, and its impacts on California.

19 Mr. Andrew?

20 MR. ANDREW: Good afternoon. We're having a
21 little bit of a computer problem. The presentation that I
22 was going to -- what I was going to present to you today
23 was changed since, I guess, the original one, that was
24 submitted. So I'm not sure if you have it.

25 BOARD MEMBER RIE: Perhaps we can go to the Corps

1 letter while they are working on the commuter.

2 PRESIDENT CARTER: All right. Do you want to --
3 Mr. Andrew, would you mind if we took a few minutes and
4 tried to work through while you are getting the technical
5 issues wired out?

6 MR. ANDREW: And I not only don't mind, I would
7 appreciate that.

8 PRESIDENT CARTER: Very good. Then if we can
9 return to Item 9, Board's Letter to the U.S. Army Corps of
10 Engineers. This is to consider approval of a letter from
11 the Board to the chief of engineers of the U.S. Army Corps
12 of Engineers expressing the Board's concern over a new
13 policy of requiring the removal of the all trees from all
14 federal levees in California.

15 Mr. Punia?

16 GENERAL MANAGER PUNIA: Good afternoon. I think
17 it's a good time to stretch our legs from this side. I
18 was sitting on that side.

19 Jay Punia, general manager of the Reclamation
20 Board.

21 I will be presenting Item No. 9. A review of the
22 U.S. Army Corps of Engineers Levee Safety Program
23 identified several flood control projects nationwide that
24 required access to address deficiencies. And based upon
25 their information, the two most common deficiencies are

1 the presence of the vegetation and insufficient
2 vegetation-free zones that will not meet the Corps
3 standard.

4 Vegetation free-zone is an area adjacent to the
5 landside and on the riverside toe of the levee. To
6 improve the public safety, the Corps has proposed that a
7 cross-section of the levee should remain free of
8 vegetation, other than ground cover needed to provide
9 protection from erosion. Additionally, the proposed
10 policy required a minimum vegetation free-zone of 15 feet
11 from the toe of the levee.

12 I want to commend the U.S. Army Corps of Engineers
13 for bringing this topic to the forefront and for proposing
14 such a bold policy in the interest of the public safety.
15 However, at the same time, there are difficulties in
16 implementing this policy right away. For example, in the
17 California Flood Control System, it's unique that our
18 levees are not set back too far from the main stem of the
19 water channel. So there's a lot of habitat along the
20 levees, based upon the environmental regulations that
21 allows, to protect the habitat. So there is a lot of
22 effort involved in removing the vegetation.

23 Additionally, there will be a lot of cost involved
24 in removing all that vegetation.

25 Therefore, we are asking the U.S. Army Corps of

1 Engineers to please slow down a little bit, work with us.
2 And we want to work with our local partner, the local
3 agencies maintaining the levees, so that we can evaluate
4 and bring some flexibility into this policy, proposed
5 policy, that we agree that we need to remove the
6 vegetation. But we haven't seen the documentation that
7 each and every tree needs to be removed from the levees.

8 So we, in this proposed letter, to the U.S. Army
9 Corps of Engineers, we are asking that let's work together
10 on this new policy and involve our local levee maintaining
11 agencies also, and then implement this revised policy.

12 And the Corps has issued a white paper on this
13 subject, which is called "Treatment of Vegetation Within
14 Local Flood Damage Reduction Systems" dated April 20th,
15 2007.

16 This was given to the Reclamation Board staff and
17 we have shared this white paper with our local partners,
18 the local levee maintaining agencies, the Department of
19 Water Resources.

20 And along with us, the local maintaining agency
21 has reviewed it and they have also provided comments to
22 the U.S. Army Corps of Engineers. And their comments are
23 similar to what we are proposing to the U.S. Army Corps of
24 Engineers, that we want to work with you in developing and
25 implementing this policy.

1 So far, I have seen comments from the Department
2 of Water Resources, Sacramento Area Flood Control Agency,
3 Central Valley Flood Control Association. And all these
4 agencies' comments reflects the same thing, that it's a
5 good idea to revisit this policy. But we need to work
6 collaboratively on this issue and develop a more cohesive
7 implementation of this policy. There are significant
8 consequences of this policy. Based upon this Corps' new
9 policy, the majority of our local levee maintaining
10 agencies will not be able to meet immediately this policy,
11 and they will not be eligible for levee rehabilitation
12 assistance under PL84-99.

13 And most of our urban areas levee maintaining
14 agencies may also not be able to meet this standard. And
15 they will lose the certification within the national flood
16 insurance program.

17 So due to these concerns, I am requesting the
18 Board to approve the letter given to you and send it to
19 the Corps so that we can work with the Corps in bringing
20 some flexibility in this policy, and so that we can work
21 with them in defining this policy and then work with them
22 to implement this policy.

23 So I will urge the Board to approve this letter so
24 that we can send this letter to the U.S. Army Corps of
25 Engineers in response to their policy on vegetation

1 management.

2 SECRETARY DOHERTY: I have a question for you. Is
3 stripping the levee of all vegetation -- trees,
4 everything -- is that stripping geotechnical engineering
5 purposes, or is this because the rivers that they have
6 worked with back east are different than ours out here?
7 And ours historically have had trees on them. And if --
8 well, you go ahead and answer that question, and then I
9 will tell you "if."

10 GENERAL MANAGER PUNIA: If it's geotechnical and
11 flood fighting concerns, that due to the vegetations that
12 the inspectors cannot see the levees and then they cannot
13 provide an effective flood fight to the levees. So
14 there's multiple aspects of vegetations giving problems to
15 the flood control features.

16 SECRETARY DOHERTY: That levee in the Sutter
17 Bypass was stripped bare. There wasn't anything on there.
18 They could see that. But they still didn't know that it
19 was going to break.

20 So what I'm getting at is, are all of the levees,
21 throughout the United States, with the exception of
22 California, are they stripped, bare?

23 GENERAL MANAGER PUNIA: I will let U.S. Army Corps
24 of Engineers answer this question.

25 SECRETARY DOHERTY: Are theirs different than

1 ours?

2 GENERAL MANAGER PUNIA: Jim, would you?

3 PRESIDENT CARTER: Mr. Sandner, we knew there was
4 a reason why you were staying.

5 MR. SANDNER: Again, Jim Sandner, Sacramento
6 District, Corps of Engineers.

7 The questions you are asking are similar questions
8 to the staff in the Sacramento district is asking our
9 headquarters.

10 If you look at levee systems around the United
11 States, there are different conditions in the various
12 zones, so to speak, across the nation. In the New England
13 area, you have rivers that have vegetation associated with
14 the levees. They are kind of asking the same kind of
15 questions with their local sponsors that you folks are
16 asking.

17 In the Northwest, Oregon, and the State of
18 Washington, they have similar conditions that we have. If
19 you look at the Midwest, Mississippi River and those kinds
20 of river systems, you have levees that are stripped, bare,
21 of bushes and trees.

22 SECRETARY DOHERTY: Is that natural?

23 MR. SANDNER: Is that natural? No, that is not
24 necessarily natural. But those levees are also set back,
25 away from the low-flow channel. So that in the low-flow

1 channel, you have riparian vegetation that's growing.

2 With the setback levees that they have on the
3 Mississippi River, they are very massive levees. You have
4 different kinds of rainfall in that area, so that you have
5 grass that grows on those levees all year long, provides
6 good erosion control.

7 Out here in the West, California, I mean, we're
8 almost a desert climate in some areas with respect to the
9 kind of rainfall that we get. So you can't promote the
10 growth of sod on the levees here in the West. So you
11 don't have good opportunities for erosion control other
12 than some of the willows that grow in conjunction with our
13 levee systems.

14 And again, in the Sacramento River Flood Control
15 Project, there's been a vegetation variance in place since
16 1949, that allowed the growth of shrubbery, willows, and
17 so forth, on the waterside slope of the levee.

18 SECRETARY DOHERTY: So how can we provide a proper
19 riparian habitat for the salmon and all these other things
20 if the sun is going to shine on this water and make it
21 boil, and we can't keep anything cool anymore?

22 MR. SANDNER: That's the \$64,000 question.

23 SECRETARY DOHERTY: Well then, why don't we change
24 the law?

25 MR. SANDNER: Well, again, what the Corps of

1 Engineers is trying to emphasize, particularly with
2 respect to the events that happened in New Orleans, is
3 that we have a charge of protecting the public when we
4 build flood control systems. And it's very important that
5 the public safety be the number one priority associated
6 with flood control systems.

7 There are alternatives to some of the problems
8 that we have in California. One of the things that we
9 were talking about earlier today was this 50-foot setback.
10 If you -- if you setback things -- when I say "things,"
11 I'm talking about development on the landside of the
12 levee, that gives you the opportunity to overbuild the
13 levee. If you overbuild the levee, then you can have
14 vegetation in conjunction with the kind of systems that we
15 have here in California.

16 Our other option is to look at areas where we can
17 set back levee systems, where there isn't development
18 currently.

19 We can also build waterside berms that will allow
20 some kind of vegetation in areas where the levees are
21 already farther away from the low-flow channel. So I
22 think there are -- there are alternatives available to us
23 here on the West Coast. I don't know that there are easy
24 alternatives, and I don't know that they are what we would
25 consider economical. It's going to cost dollars.

1 SECRETARY DOHERTY: So the only places where you
2 can set back will be the agricultural areas. And you
3 can't ask the urban people. Why no, gracious, they won't
4 move, whether it's for their safety or not.

5 So agricultural, in the number one agricultural
6 state in the union, is going to be drastically affected;
7 isn't it?

8 MR. SANDNER: I would say that it would depend
9 what you do you with the uses of the land on the waterside
10 of the levees if you do setback levees. You may still be
11 able to do agricultural on the waterside of the levee for
12 some kind of crops.

13 SECRETARY DOHERTY: Yeah, but we'll need it for
14 recreation.

15 BOARD MEMBER BURROUGHS: A couple questions: You
16 mentioned variance and that there are certain variances in
17 place now to allow vegetation.

18 Is it possible for the whole state of California,
19 in one sweep, to ask for a variance, or would each
20 district have to ask for variances? And how long does
21 that process take?

22 MR. SANDNER: Those are questions that, you know,
23 I don't have answers off the top of my head. California
24 could, you know, go in and request whatever they chose
25 from the Corps of Engineers from a statewide standpoint.

1 Again, what I think we have to do is look at each
2 river system somewhat separately, because flood control
3 systems have been designed differently for all the
4 different river systems throughout the United States. So
5 I don't know that one size fits all, which is what a lot
6 of the folks are commenting about on the Corps' policy.
7 The Corps' policy is, is kind of a, you know, this is how
8 we're going to do it for all levees. And that isn't
9 necessarily taking the right approach.

10 BOARD MEMBER BURROUGHS: Has the Corps, from here,
11 in California, given comment to that effect, to
12 headquarters?

13 MR. SANDNER: We have made specific comments to
14 headquarters with respect to the white paper, and pointed
15 out a number of different things with respect to the
16 endangered species that are listed here in California and
17 also the specific kind of construction of our levee
18 systems here in California.

19 BOARD MEMBER BURROUGHS: Another question: The
20 removal of trees, does that include the root system or
21 just to cut the tree in place, and leave the roots in
22 place?

23 MR. SANDNER: Our geotechnical engineers are very
24 concerned about cutting the trees and leaving the root
25 systems. They believe that if you do that, you have the

1 decay of the root system, which will then allow pass for
2 seepage through the levee. And so I believe, currently,
3 the thinking is that if you do cut large trees, maybe you
4 would have to go in and remediate the root systems as
5 well.

6 BOARD MEMBER BURROUGHS: Okay. And another
7 question for the Corps: Would -- I have heard in the past
8 that the Corps has waived mitigation costs for endangered
9 species projects. Would this be one that the Corps would
10 consider?

11 MR. SANDNER: The question was that we have waived
12 mitigation?

13 BOARD MEMBER BURROUGHS: Yes.

14 MR. SANDNER: I don't know that the Corps has
15 waived mitigation requirements. Maybe various other state
16 or federal agencies have waived over mitigation
17 requirements. But I don't know that the Corps has done
18 that.

19 BOARD MEMBER BURROUGHS: Well -- okay. Thank you.

20 SECRETARY DOHERTY: I think we need something --
21 go ahead, Teri. I'm sorry.

22 BOARD MEMBER RIE: I wanted to thank Jim Sandner
23 for sitting here all day to answer our questions.

24 And I just wanted to make a comment that
25 yesterday, the United States Senate confirmed General Van

1 Antwerp as the new Army Corps of Engineers chief of
2 engineers. And I wanted to express our congratulations
3 and request that the letter be addressed to the new
4 general. And that's it.

5 BOARD MEMBER BURROUGHS: Mr. President, I have
6 comments that I would like to have included in the letter,
7 of concerns.

8 PRESIDENT CARTER: Okay.

9 BOARD MEMBER BURROUGHS: Would you like me to just
10 share those concerns now?

11 PRESIDENT CARTER: Sure. Yes, please.

12 BOARD MEMBER BURROUGHS: Okay. I'm not -- I would
13 need help with wordsmithing, but the concern is, one,
14 on -- if we could express to the Corps our desire to
15 collaborate and in helping with the cost that would be
16 associated for endangered species in regards to this
17 project.

18 Two, that instead of just saying it's a huge
19 amount of time, that we request the Corps to give us
20 adequate time to perform the removal over an extended
21 amount of time, because one year is not feasible.

22 And three, if the Corps would also give
23 consideration to our number one priority, being flood
24 safety and that if we followed the Corps' direction, we
25 would not be prioritizing the best use of our funding for

1 providing flood safety.

2 And three -- And then -- this is 1, 2, 3, 4, 5.

3 Five. Comments about vegetation being necessary for
4 prevention of erosion in regards to grasses. And I don't
5 quite understand how it could be a blanket, all vegetation
6 to be removed.

7 PRESIDENT CARTER: Okay. Any other comments?

8 GENERAL MANAGER PUNIA: I just want to let the
9 Board know that the district staff is working with us. I
10 think they have similar concerns too, so they can bring
11 the concerns to the headquarters also.

12 SECRETARY DOHERTY: But I do think it's important
13 that we notify them, and that we will work with them if
14 they will work with us.

15 PRESIDENT CARTER: What -- is there a -- is there
16 a reason for wanting to send this off right away? Is
17 there some sort of a comment deadline on this? Does it
18 make sense for maybe staff to try and incorporate Rose
19 Marie's concerns? We can change the -- who we're
20 addressing the letter to. Is this time critical?

21 GENERAL MANAGER PUNIA: No. The time-critical
22 item was to provide comments on this. The staff has
23 already provided comments on the white paper. There is no
24 deadline, unless Jim knows any deadline to provide
25 comments on the general policy.

1 MR. SANDNER: No.

2 GENERAL MANAGER PUNIA: No, there is no deadline.

3 So we will be glad to revise the letter incorporating

4 Board Member Rose Marie's comments.

5 PRESIDENT CARTER: Okay. Would -- would anybody

6 object if we go ahead and make another stab at a small

7 revision?

8 SECRETARY DOHERTY: That's no problem.

9 PRESIDENT CARTER: Okay. Then what we'll do is --

10 Rose Marie, if you can submit your comments to General

11 Manager Punia and staff can make another pass at that.

12 We'll -- we'll address it at the next board meeting.

13 BOARD MEMBER BURROUGHS: I would be happy just to

14 submit my concerns and have them added and have a letter

15 sent off.

16 GENERAL MANAGER PUNIA: In that case, the Board

17 can delegate the authority to the president of the Board,

18 that we will then incorporate the comments, and then

19 President Ben Carter can sign on behalf of the Board.

20 PRESIDENT CARTER: Is that okay?

21 VICE PRESIDENT HODGKINS: I so move.

22 SECRETARY DOHERTY: I will second that.

23 VICE PRESIDENT HODGKINS: I would like to get it

24 out.

25 SECRETARY DOHERTY: Yes, we could even sign this,

1 and they could incorporate it in here somewhere.

2 BOARD MEMBER BURROUGHS: Yeah.

3 BOARD MEMBER RIE: And again, I would like to
4 request that we include congratulations to General Van
5 Antwerp.

6 GENERAL MANAGER PUNIA: We will do that.

7 SECRETARY DOHERTY: Thank you, Mr. Sandner.

8 PRESIDENT CARTER: Thank you very much.

9 MR. SANDNER: Thank you.

10 GENERAL MANAGER PUNIA: So we'll revise the
11 letter, and then the letter will go under President
12 Carter's signature.

13 PRESIDENT CARTER: We had a motion.

14 All those in favor, indicate by saying "aye."

15 (Ayes.)

16 PRESIDENT CARTER: And opposed?

17 Thanks.

18 We're on to Item 11.A. We are technically ready.

19 SECRETARY DOHERTY: What are we on now?

20 PRESIDENT CARTER: Item 11.A. is part of our
21 Global Climate Change. It's Global Climate Change and its
22 Impacts on California.

23 Mr. Andrew is here to address us.

24 (Thereupon an overhead presentation was
25 presented as follows.)

1 MR. ANDREW: I appreciate your patience for the
2 presentation. Looks like we are technically ready. It's
3 my pleasure to be here to tell you -- finish out the other
4 half, or, I think, the other remaining, maybe, third of
5 Maurice's presentation this morning on California Climate
6 Change on California's water resources.

7 I'm preliminarily going to be telling you about
8 the, sort of, broad state response to climate change,
9 starting at the intergovernmental, interdepartmental
10 level, if you will, interagency level in California. And
11 then we'll wind up here at DWR and what we're doing.

12 --o0o--

13 MR. ANDREW: Just to basically segue from
14 Maurice's presentation to mine, these are pretty much the
15 exact five bullet points that Maurice had. And I think
16 he's covered these very well. In the interest of time,
17 I'm just going to move on from here.

18 --o0o--

19 MR. ANDREW: Where the department is -- I did say
20 we're going to go to the state level, but you have to know
21 where we've been for some time now, actually. Back in
22 2003, I believe it was, climate change, we were in the
23 process of updating the California water plan and doing it
24 through a new stakeholder-based process. And climate
25 change was one of the many new issues that was raised as

1 part of the process and actually a bit of a flashpoint
2 among the stakeholders in terms of whether it should be
3 included, whether it was actually going on or not.

4 So in 2003, the Department, at least as part of
5 that process, made a decision at the executive level that
6 the Department's decision was that climate change was
7 real. So we've been working on that assumption for the
8 last four years now.

9 Since then, I think that the decision to make such
10 a statement and to move forward from that has been proved
11 out -- especially within the last 12 months without
12 climate change, it has taken on even more concern across
13 the country.

14 And I think we would say, and I think it would not
15 be an exaggeration, but we think this is probably going to
16 be the challenge for us in water management in the
17 21st century.

18 The only good news -- and I think Maurice
19 highlighted this as well -- came up in, I think, Q&A, was
20 that this is happening incrementally, at least so far it
21 has. And I realize that my kids were watching "The Day
22 After Tomorrow" last night on Fox Television. I was not.
23 I was just getting back from work at that time.

24 So West Hollywood is correct. I think the IPCC
25 did not dwell a lot on this in the report. It

1 basically -- the abrupt version was not part of the
2 consensus in the recent IPCC and intergovernmental climate
3 change reports.

4 And so that is perhaps the good news, that this is
5 going to continue to unfold before us in an incremental
6 manner, and that our water systems have a lot of
7 flexibility. We can build more flexibility in them, and
8 we may have -- now that we're kind of recognizing this
9 threat and we're paying attention to it, maybe we'll be
10 able to get the response right and we may have the time to
11 do that.

12 --o0o--

13 MR. ANDREW: What has been that response? We can
14 trace back to the broad state response to this executive
15 order signed by the governor, almost exactly two years
16 ago, as part of a U.N., I think, Environmental Day in San
17 Francisco. This is when he said "Climate change is real.
18 The debate is over," I think, was the quote that is often
19 attributed to him.

20 This established the aggressive greenhouse gas
21 emission targets that Maurice mentioned, for the targets
22 that in 2010, which is only two and a half years away, we
23 need to be back at 2000 levels. In 2020, we need to be at
24 1990 levels. And in 2050, we need to be at 80 percent of
25 1990 levels. These are very aggressive targets to meet.

1 It also required a biannual assessment from California
2 state agencies on climate change.

3 --o0o--

4 MR. ANDREW: This was the Department's response,
5 or a portion of that climate -- first Climate Action Team
6 report, which was published in March 2006. Our appendix
7 came out about three months later. This has gotten quite
8 a bit of circulation among both the technical community
9 and the policy community. This was basically our first
10 quantitative look at how climate change is affecting water
11 resources. And Maurice -- much of the information Maurice
12 had in his report is found in this report and his
13 presentation.

14 --o0o--

15 MR. ANDREW: One of the other things the executive
16 order did, S305, is to form the governor's Climate Action
17 Team. This team is at the executive agency level. It's
18 chaired by the secretary of Cal/EPA Linda Adams. And the
19 Department is a member of the Climate Action Team.

20 In that first report, the -- most of the what the
21 Climate Action Team is focusing on is the mitigation side,
22 trying to prevent and reduce greenhouse gas emissions in
23 California. They -- to meet the 2020 goal of reducing us
24 back to 1990 levels, the greenhouse gas emissions in
25 California, the report sets out a target of 174,

1 175 million metric tons of carbon dioxide equivalent that
2 we would have to -- that's how much we would have to
3 reduce. As Maurice mentioned, it's either a 25 to
4 30 percent reduction from what we expect greenhouse gas
5 emissions to be at in 2020. So it's quite an impressive
6 target.

7 I'm going to get to -- I'm going to talk -- again,
8 another point that Maurice made in terms of adaptation,
9 where the water management community probably needs to be,
10 but just to not let the water management community off
11 altogether. There is a small portion of that 174 million
12 metric tons of carbon dioxide equivalent that the water
13 management community is on the hook for. It's about a
14 half of 1 percent. So obviously, this may not apply as
15 much to flood management. But for many other aspects of
16 water management, they are very energy intensive,
17 especially at the end uses, of what the customer does or
18 what a business does with the water. And so there is a
19 role for water management to play in mitigating climate
20 change by reducing the energy intensity of water in
21 California.

22 --o0o--

23 MR. ANDREW: Probably the most significant thing
24 that came after the executive order was the passage of
25 AB 32. I think, it was August of September of 2006 is

1 when the governor signed it. This actually codified the
2 2020 target, the executive order from the governor. So
3 now it's no longer a target; it's a statutory requirement,
4 the 2020 goal of reducing to 1990.

5 This law also provides for mandatory reporting on
6 sources of greenhouse gas emissions. It implements a
7 markets and regulatory system of compliance. And as you
8 might tell from some of the press accounts lately, that's
9 been quite a bit of a debate. The administration, I
10 think, probably favors more of a markets approach to
11 reductions. The Speaker's Office and many of the
12 Legislature would like to see more of a commanding
13 control. The law allows for both, and that's probably
14 where we're going to wind up. And given the
15 aggressiveness of these targets, we'll probably need both.

16 It caps emissions in 2012, and it also requires
17 the Air Resources Board to make a list of early actions.
18 And again, that's been in the press quite a bit, lately.
19 Basically, things that the state can do to -- in advance
20 -- I guess I should back up.

21 The Air Resources Board, under AB 32 must
22 promulgate regulations to meet these goals, that 2020
23 goal. But they didn't want to wait for ARC to write
24 regulations on that, which aren't required until about
25 2009 or 2010. So they are also required under AB 32 to

1 develop a list of early actions that the state can take to
2 reduce greenhouse gas emissions. And right now, that
3 draft list was published by the ARB -- I think, in late
4 May -- I'm sorry. We're not even at late May. I think it
5 was late last month -- was to look at greenhouse gas
6 emissions from landfills, to look at refrigerants --
7 controls on refrigerants, and also a low-carbon fuel
8 standard. So those are the three right now that are on
9 the list. But that's subject to public hearing and
10 finalization by the ARB in late June.

11 --o0o--

12 MR. ANDREW: So, so far, I've gone -- I've talked
13 mostly about the executive order, and the Climate Action
14 Team and AB 32 is primarily on the mitigation side of
15 climate change. And again, I want to pick up where
16 Maurice was in terms of adaptation.

17 In many ways, the story for the next 30 years, at
18 least -- maybe 40. We're looking at really a legacy of
19 emissions that already have been emitted; they are in the
20 atmosphere; they are having their effect; they are not
21 going to be able to do anything to reduce those, those
22 affects over the next 30 to 40 years. And the climate
23 models basically show that, if you look at the climate
24 models for what the projections are for various effects,
25 they actually agree quite well over the next 30 or 40

1 years. And if that is indeed the case, then adaptation on
2 the water side -- although we do have this mitigation
3 role -- are going to have to adapt to what that story, the
4 story of that has been written for us in terms of how the
5 climate is going to change.

6 --o0o--

7 MR. ANDREW: This was highlighted. This is a
8 cover of the Working Group II report from the
9 Intergovernmental Panel on Climate Change. This was
10 released in April. The panel is producing -- I think, as
11 Maurice mentioned, its fourth assessment this year. Three
12 parts of it are out; we're waiting for the fourth.

13 This was the second part and focuses entirely on
14 impacts, and had talked a lot about fresh water impacts
15 and impacts to the ecosystems, things that we would be
16 concerned about or are concerned here in California as
17 well.

18 I would highlight that third bullet there, where
19 it made the case that -- which I think we would agree
20 with, that the impacts from climate change are as
21 dependent as much upon the changing climate itself as how
22 you adapt to it, what your vulnerability is.

23 There are unfortunately many parts of the world
24 that don't have the capacity to adapt. But we in the
25 United States and California, in particular, probably do

1 have. And so they are going to be a lot more trouble than
2 we are. But really, how climate change plays out is -- I
3 think Professor Bea hit on this as well in terms when he
4 said, you know, there aren't natural disasters; there are
5 natural hazards. So you get what nature has given you,
6 then you need to figure out how to respond to that. And
7 that's really where we're at.

8 --o0o--

9 MR. ANDREW: And we were at that, I think, already
10 with the -- this was covered in the California Water Plan
11 Update, which was issued in 2005. Climate change was
12 actually one of the 14 major recommendations. And I think
13 probably Maurice had a very large role in making that
14 happen.

15 And I must admit, I don't think we were
16 necessarily thinking about climate change in terms of the
17 diversified portfolio approach, which is called for in the
18 California Water Plan Update, basically having this
19 ability to adapt to a number of different uncertainties in
20 California water management. But as it turns out, the --
21 just briefly, this was a recommendation which actually
22 looks a bit modest, looking back two years, given
23 everything that's happened since then.

24 --o0o--

25 MR. ANDREW: But actually, I am implementing,

1 these resource management strategies, being able to adapt,
2 especially at a regional level, to changes like population
3 and changes in the economic sector, changes in land use.
4 These actually work very well for climate change as well,
5 and it's probably going to be our main strategy for
6 responding to climate change, at least in the short term.

7 --o0o--

8 MR. ANDREW: Fortunately, the California Water
9 Plan updates lays out that the California Water Management
10 will not just be a plan. This is not a shelf. The voters
11 were very generous to us. In addition to passing
12 Proposition 1E, also, passed was Proposition 84, which
13 provides quite a bit of money, billions of dollars, to
14 implement the concepts and the strategies in the
15 California Water Plan Update.

16 And as we do this, climate change is going to be,
17 I think, foremost on our mind in implementing this bond
18 and helping implement the water plan.

19 --o0o--

20 MR. ANDREW: As we move on to the next water plan,
21 as it turns out, I think we will probably see -- I don't
22 want to -- it's a stakeholder-based process. Our question
23 is, how the stakeholders are going to guide us into what
24 they think is important next time. But preliminary
25 interviews with both stakeholders to the California Water

1 Plan Update and other state agencies -- basically, there's
2 about 20 state agencies, including your own that have
3 something to do with water in California at the state
4 level. These preliminary interviews have indicated to us
5 that they see climate change is probably maybe going to be
6 the new theme for the next Water Plan Update. And we've
7 already embarked on that process.

8 As a part of that process, we're forming a Climate
9 Change Technical Advisory Group. This group is made up of
10 leading scientists, planners, people that have helped us
11 with the last Water Plan Update, people who helped us with
12 that report that was issued in July, 2006.

13 These are really some of the leading thinkers on
14 climate change from the West and from California. And
15 we're very happy to have them on board to help us better
16 integrate climate change in the California Water Plan.

17 --o0o--

18 MR. ANDREW: I want to close with, really, where
19 the Department is going, which is really more than just
20 going around, giving a lot of talks about climate change.
21 And how this has been made real -- very affordable to the
22 Department of Water Resources.

23 Earlier this year, we filed an Intent to Register
24 under the resources agency to join the California Climate
25 Action Registry. The Registry is a quasi-state agency

1 where governments, businesses, whoever, can go and
2 actually say, "We would like to find out what our carbon
3 footprint, so to speak, is. This has become actually
4 quite a popular thing to do. It's a voluntary thing to
5 do. And the Department -- for us to move in this
6 direction, because we do -- part of the Department does
7 include the State Water Project. The State Water Project
8 does include the single largest lift of water anywhere in
9 the entire world. You can imagine that when we actually
10 figure out what our carbon footprint is -- there's going
11 to be a carbon footprint, let's say.

12 So for us to make that move has been a very, I
13 think, real -- it's more than just talk that we're taking
14 this seriously, the Department of Water Resources.

15 Along with that, one of the things that we've had
16 for some time, we owned a partial ownership in a power
17 plant north of Las Vegas in partnership with a Nevada
18 power company called Reid Gardner Plant. Reid Gardner
19 Plant is an old fire plant. And we've had this ownership,
20 I don't know, for the last 30 years.

21 Our contract for that, for our portion of the
22 plant to help power the State Water Project ends in 2013.
23 Very recently, within the last few weeks, we have notified
24 Nevada Power Company that we will not renew our contract
25 when it terminates in 2013.

1 So as of 2013, we have signaled our intent that we
2 will not have any hold in the State Water Project Power
3 Portfolio.

4 And again, I think that's a very -- that's real.
5 That's something that the Department has done. We've
6 decided to take a leadership role in helping to mitigate
7 greenhouse gas emissions through these two actions.

8 I think in the interest of time, I've covered most
9 of the rest of this. Again, I think Bulletin 160, which
10 is the plan for all of California water management, not
11 just the Department of Water Resources, is climate change
12 is probably going to be the leading topic. As part of
13 that, we had to do some of the other things we were doing
14 at the statewide level, is better integration, not only of
15 climate change into water management, generally, but also
16 to flood protection and then integrating flood protection
17 and water supply management seamlessly.

18 And again, we need to be very careful as we go and
19 actually carry out our water management issue, which is
20 very important to the state of California. We need to be
21 conscious of how that affects the greenhouse gas emissions
22 and the energy intensity of California, so that we're not
23 unnecessarily exacerbating the problem with climate
24 change.

25 --o0o--

1 MR. ANDREW: With that, I appreciate your time.

2 And I would be happy to answer any questions.

3 PRESIDENT CARTER: Thank you very much,

4 Mr. Andrew.

5 Any questions?

6 SECRETARY DOHERTY: How will you replace that
7 power being received from Nevada?

8 MR. ANDREW: That's also an active discussion
9 topic within the Department because that's going to be --
10 right now, the State Water Project probably runs on
11 about -- you know, we're probably the single -- I think we
12 are the single largest electricity consumer in the state.
13 We consume something like 3 percent of the state's
14 electricity, just to run the State Water Project. We make
15 back about half, of half of what we need, we make back
16 through our own hydro-generation.

17 I think the portfolio is something like -- I'm
18 sorry, I'm talking off the top of my head. I think it's
19 about 60 percent hydro, which large hydro is not
20 necessarily -- is not classified as a renewable resource
21 in California. But it is -- it does not emit greenhouse
22 gas emissions -- relatively small amounts of greenhouse
23 gas emissions, once you construct the facilities.

24 So the portfolio already has a good balance, I
25 think, in terms of renewables if you will. Coal, I think,

1 played up -- the Reid Gardner contract played up about
2 12 percent of the portfolio. It's a small amount, but
3 it's not an insignificant amount. And we're definitely
4 going to have to look at how we're going to make that up,
5 whether we're going to move to more renewables. And
6 again, the only benefit here, I guess, is that we've got
7 five to six years to work that out.

8 PRESIDENT CARTER: Any other questions?

9 BOARD MEMBER BURROUGHS: Quick question on vehicle
10 emissions.

11 MR. ANDREW: Yes.

12 BOARD MEMBER BURROUGHS: You said that that was
13 going to be coming down the pipe and dictated through
14 legislation.

15 Do you have any ideas of, is that going to be
16 directed to use more electric vehicles, or what other type
17 of vehicles are you recommending?

18 MR. ANDREW: Well, we're not. But I think the Air
19 Resources Board, there's a couple of things going on.
20 This early action list does include a low carbon fuel
21 standard, so the development of low carbon fuels is going
22 to be -- it's going to be one of the initial actions
23 after -- if it is approved by the Air Resources Board at
24 the end of June. So that's one part of the transportation
25 duties.

1 Transportation actually makes up something like 40
2 to 50 percent of the greenhouse gas emissions in
3 California. So it's really the big dog that will be
4 going -- the climate action team will be focusing on.

5 In the long term, I -- it would seem like we're
6 probably -- I've heard the Air Resources Board say that
7 long term to meet these goals that are in -- well, they
8 are not goals anymore in AB 32. They are statutory
9 requirements. We are probably going to have a fundamental
10 relook and maybe redesign of our transportation system.
11 And whether that's going to vehicles that run on
12 alternative fuels or mass transit or whatever, smart land
13 use, smart growth type of things, I think pretty much
14 everything's going to be on the table to meet these goals.

15 BOARD MEMBER BURROUGHS: How will we be in
16 communication in the future? You mentioned the joint
17 committee communicating and making sure that we -- through
18 our flood safety program, that we're not adding to the
19 problem.

20 MR. ANDREW: I would be happy to remain in
21 communication -- I'm sure I'm going to be in communication
22 with Reclamation Board staff, or you can always invite me
23 back here to give you an update on where we're at. We
24 have these two planning -- actually, probably, multiple
25 planning processes going on at this time within the

1 Department in terms of both flood and the broader water
2 management planning under Bulletin 160. And we recognize
3 the need to better integrate all of that and integrate
4 that into the Climate Change.

5 BOARD MEMBER BURROUGHS: Thank you. That would be
6 very good.

7 PRESIDENT CARTER: Any other questions from Board
8 staff?

9 Thank you very much for coming this afternoon.

10 MR. ANDREW: You're welcome.

11 PRESIDENT CARTER: Now we are moving on to
12 Item 12. It's a Briefing on Government Land Acquisition
13 Laws and Determination of Fair Market Value.

14 Mr. Taber?

15 MR. TABOR: My name is Ward Tabor. I'm assistant
16 chief counsel with the Department of Water Resources. And
17 some of you may know me up there, on the dais, and some of
18 you may not.

19 I started my state service in 1989, working for
20 the Reclamation Board. And I was one of the primary
21 authors of your encroachment regulations. I served as the
22 Board counsel for three years, and I served as the acting
23 general manager during 1997 when we were rehabilitating
24 after the floods.

25 Since then, I've been involved on and off in

1 Reclamation Board and other flood control matters. And my
2 specialty is really land acquisition. And so I have been
3 asked today to share with you some of my experience and
4 knowledge on both the laws and procedures related to when
5 public agencies go about acquiring lands for specifically
6 flood control projects, but obviously it applies to any
7 kind of a public infrastructure project.

8 I understand that there's been some concerns
9 raised about what some of the legal principals are,
10 related to public land acquisition, and just compensation
11 that affect agricultural owners in particular and other
12 owners as well, and specifically by levee projects and
13 levee setback projects, once again, more specifically; and
14 questions about, what's the proper basis for compensating
15 a landowner when the public needs to acquire their
16 property.

17 And I want to assure you that the principles that
18 are -- that relate to this topic are ones that go way back
19 in both our federal and state constitution. And both of
20 the constitutions guarantee that property owners be
21 treated fairly and be fairly compensated when the
22 government needs to acquire their property.

23 And I'm going to touch upon some basic principles;
24 I think they are important building blocks for you to
25 understand some of the other complexities. And I think I

1 will be able to address the issues that have been raised
2 and specifically, as I understand it, in one of your Board
3 subcommittee meetings on the TRLIA project.

4 First of all, I want to share and remind the Board
5 members, as well as members of the public, that under the
6 Government Code, public agencies are required to use every
7 reasonable effort to acquire property through a voluntary
8 transaction. That means that we can't jump to
9 condemnation to acquire property. We have to use every
10 reasonable effort. Those are the words used in the Code.
11 And before the government can acquire property, they must
12 perform an appraisal of the property, and the property
13 owner needs to be invited to attend the inspection of the
14 property by the appraiser.

15 It gets dicey when the property owner doesn't want
16 the appraiser to be on the property. And appraisers don't
17 have the right to trespass, but appraisers do have the
18 ability to inspect property without trespassing.

19 SECRETARY DOHERTY: Now, you have down here, you
20 can have an appraiser. In some of the transactions we've
21 been through -- I have an appraiser, you have an
22 appraiser, together we decide on a third appraiser.

23 Now, if I'm going to deal with you, I can't have
24 an appraiser there either, or can I?

25 MR. TABOR: The property owner is free -- they can

1 be there themselves or they can have a representative be
2 there as part of that inspection tour.

3 SECRETARY DOHERTY: Right. So I can have a
4 certified appraiser?

5 MR. TABOR: Absolutely. Yeah.

6 SECRETARY DOHERTY: Okay.

7 MR. TABOR: And as I describe the process in more
8 detail, I will explain where the landowner's appraiser can
9 come into the process.

10 The next step in the process, after the appraisal
11 has been done, is for the public agency to make a written
12 offer at the amount that it believes is just compensation.
13 And it is required to be no less than fair market value.
14 And we'll get to the definition of "fair market value,"
15 because, once again, I think once you understand that
16 definition, you will understand that it was defined in a
17 way to treat property owners fairly.

18 And the third basic policy, before we get to that
19 definition is that if the acquisition of a portion of a
20 parcel would leave the remaining portion of the property
21 in a shape or condition that would constitute an
22 uneconomic remnant, then the public agency, it can be
23 required to buy the entire parcel if the property owner so
24 chooses. So if the property owner wants to keep the
25 portion that the public doesn't want to use, it doesn't

1 need to be bought. But if you are really being left with
2 an uneconomic remnant, then the public agency is required
3 to purchase the entire parcel. And there's lots of
4 experiences where that has happened.

5 Now let's talk about the definition of "fair
6 market value." And in the text you have, I have bolded a
7 couple of things. But the most important concept -- two
8 important concepts are, is that the fair market value of
9 the property is the highest price on the date of the
10 evaluation that would be agreed to by a seller. I'm not
11 going to read the rest of it. But you are setting
12 forth -- really, it's a hypothetical transaction, because
13 obviously we know eminent domain is not a voluntary
14 transaction. But the value that the law requires us all
15 to use is one that's based upon this hypothetical
16 transaction. The highest price that a willing buyer would
17 pay to a willing seller, knowing everything that is
18 reasonable about all the uses and purposes for which the
19 property is reasonably adaptable and available. And these
20 are words from the Code of Civil Procedure, but they are
21 actually words that are derived from old Supreme Court
22 cases where the Supreme Court enunciated this principle as
23 to what the property owner's rights are when the
24 government needs to acquire that property.

25 So really, the key concept here in terms of value

1 to the property owner is this concept of highest and best
2 use. So it's based upon this definition of fair market
3 value, and it's a consideration of what is this property
4 reasonably adaptable to you -- to be used, whether now or
5 in the future.

6 So you can look at -- obviously you look at how
7 the property is being used now. But you also look at what
8 the property may be adaptable for in the future. So
9 there's a whole variety of things that an appraiser and a
10 court can look at, if it gets to a court.

11 Now, as to what the highest and best use of a
12 property is -- and obviously one of the first things an
13 appraiser would look at is, how is the property being used
14 now. But then you would look for, is the property
15 adaptable to some other use? Does the property have the
16 right size, shape, topographical conditions that would
17 accommodate some other use than what's currently being
18 used.

19 You look at what the neighborhood is like or what
20 the general area is. What's going on in the vicinity? Is
21 there access? Are there utilities? Are there streets?
22 Are there other things that you could see that would help
23 determine whether or not it's likely that there is a
24 different use?

25 You would look at -- normally, there's a

1 particular use that one might be looking at, that's
2 different than the present use. But you would look at
3 whether or not you would have to do a lot of things in
4 order to make the property useful for that particular
5 purpose. So that's something that would -- that a buyer,
6 a hypothetical buyer, would look at before he -- he or she
7 put their money down on a piece of property.

8 You would look at whether or not there's hazardous
9 materials that need to be dealt with. You look at whether
10 or not there's a CEQA analysis that supports a higher use
11 than what the current use may be.

12 You look at whether or not there's architectural
13 and engineering studies, feasibility studies, that
14 demonstrate that this property has a higher use. And
15 obviously one of the key things that an appraiser is going
16 look at, because that's the information they have access
17 to, is what does the general plan say about the property?
18 Is it planned for open space? Is it planned for urban
19 development? Is it planned for commercial? Is it planned
20 for whatever the use may be?

21 Is there a reasonable probability that the general
22 plan may change? Is there reasonable probability that the
23 zoning and other land use approvals may be forthcoming?
24 Are there conditions that would be placed upon that kind
25 of development if the zoning and planning were to change.

1 That would need to be taken into consideration as part of
2 the value. Are there other things that may affect the
3 value. Like, for example, is the land subject to liens in
4 that contract that has another ten years to go before the
5 property owner could get out of it? That would be an
6 indication to me that highest and best use is probably
7 agricultural at least for the next foreseeable window.

8 So all these kinds of factual questions can be
9 asked by the appraiser. And obviously when the government
10 appraiser does their work, they have to make certain
11 assumptions; they have to go upon information that's
12 available when the purpose is for inviting the property
13 owner to participate is for the property owner then to
14 give the appraiser, "Here's my feasibility report for this
15 development that I'm proposing on my property. Here is
16 the soil analysis that I've done. Here's my engineer's
17 analysis of what I have proposed to do. Here's my pending
18 general plan change application that shows that this land
19 is likely to be changed to a higher and best use."

20 So all of these are things that can come out in
21 this negotiation process, or they can come out if the
22 negotiations are unsuccessful and the public agency has to
23 proceed with eminent domain. It can come out as a matter
24 of the litigation in the eminent domain proceeding.

25 As I understand, one of the other issues that has

1 been asked is whether or not in the acquisition of
2 property by a public agency, whether you can value the
3 property not based on what it is in the hands of the
4 property owner, highest and best use in their hands, but
5 that you can look to the benefit that the public agency is
6 going to achieve by acquiring this property.

7 And once again, there's a long history of case law
8 on this topic. And we have both Government Code
9 provisions as well as provisions under the Code of Civil
10 Procedure that says, "Thou shalt not take into
11 consideration what the public intends to use the property
12 for when you arrive at a fair market value of the property
13 taken," because you look at the value of the property in
14 the hands of the property owner, not what the value may be
15 to the public agency and whatever project they are going
16 forward with. And in fact, 1888 decision of the
17 California Supreme Court -- and this is a reservoir
18 case -- the Supreme Court says, "It seems monstrous to say
19 that the benefit arising from the proposed improvement is
20 to be taken into consideration as an element of the value
21 of the land."

22 This is a case where it was an acquisition of land
23 for a reservoir and the property owner says, my property
24 is reservoir land, so it's obviously very, very valuable.
25 And the Supreme Court said, "No, you can't look at what

1 the value of the land is in the public agency. It's the
2 public -- it's only the public that would be able to build
3 this reservoir the way it's planned," and it's not that
4 value that you look at in the hands of the property owner.

5 But another important concept that I think is the
6 way that property owners aren't treated fairly is in the
7 area of severance damages. And depending upon how you do
8 a new levee project -- and the Reclamation Board is really
9 the state champion on levee projects, and I see a lot of
10 case law involved in the Reclamation Board in their levee
11 projects over the years. Because it's quite common over
12 time that we need to expand the levee; we need to make it
13 higher; we need to make a pit wider; we may need to move
14 it slightly.

15 And so there's case law out there, and the cases
16 deal with the situation of when you take a little piece, a
17 sliver of property owner's land, that's one thing. And
18 obviously, a government has to pay for that. But when you
19 take that, you can have an impact and what you are not
20 taking from the property owner. And so the concept of
21 severance damages has evolved over time to provide a
22 mechanism to compensate the landowners, not only for the
23 value of the land the government is acquiring, but for the
24 effect of the acquisition on which you have left behind.

25 And so for example, I've listed in here, this is

1 actually a Reclamation Board eminent domain case,
2 Sacramento and San Joaquin Drainage District versus Reid,
3 from 1963, where the property owner raised a number of
4 issues that are probably not uncommon in the Central
5 Valley, when faced with a new levee project.

6 There's going to be more weeds, because the farmer
7 can't control the weeds on the levee right away. Maybe
8 the Corps of Engineers can.

9 The difficulty of moving livestock over, across,
10 the levee, because the Reclamation Board doesn't want you
11 moving your livestock willy-nilly across the levee. It
12 has the potential to impact the soil structure.

13 You are going to lose your visibility to see
14 trespassing hunters and fishermen as they are wanted. And
15 trespassing hunters may be attracted to a borrow pit. And
16 all those things, the court said, could be considered as
17 elements of severance damages in an acquisition.

18 Now, whether they were eventually in that case, I
19 don't know the answer to that. It's always interesting
20 sometimes to go back and see what happens in a case after
21 the appellate court rules from on high. And it's usually
22 quite different from what you would expect.

23 But there's a whole number of things that really
24 can and should be looked at in this context. And, you
25 know, the destruction of irrigation systems, the various

1 kinds of crop damage, that can come about both from
2 construction as well as operation and maintenance of the
3 public facility, the interference with just the way you
4 manage and access your fields, drainage problems, and just
5 the ongoing maintenance issues that the public agency will
6 be involved with in the project.

7 Now, the mechanism -- one of the mechanics that
8 the Reclamation Board and DWR staff use in these
9 situations, when you are affecting a landowner's property,
10 is -- is their infrastructure. And you have wells; you
11 have irrigation systems; you have other kinds of water
12 conveyance systems, drainage systems. And we have always
13 worked fairly and -- and well with landowners because we
14 come up with a mechanism to compensate them for
15 reconfiguring their facilities in order to meet the public
16 need of either widening, heightening, or moving the levee
17 around.

18 And there's a whole variety of ways that we come
19 up with. And you all have been sitting Board members for
20 a while, and I don't think you probably have seen very
21 many Resolutions of Necessity. And in my 19 years of
22 service with the state, I think -- I don't think we've
23 even brought a half a dozen Resolutions of Necessity to
24 the Reclamation Board for eminent domain. And why is
25 that? It's not because we haven't had projects. We have.

1 And we've had thousands of successful acquisitions. And
2 those come about by treating property owners fairly, both
3 in process and by treating them fairly in compensating
4 them adequately.

5 But it is a fairness both to the public agency as
6 well as to the private party that needs to be considered.
7 A public agency compensating a landowner more than is
8 really truly fair market value may be expeditious for your
9 project, but what about the next agency that has to do a
10 project. And the Reclamation Board or TRLIA or SAFCA are
11 certainly not the only public agencies that have public
12 projects that require eminent domain.

13 If we all just spend whatever it takes to get the
14 property, irregardless of what fair market value is, then
15 we have really a scandalous situation that really could be
16 tantamount to the misuse of public funds.

17 But clearly, the project's important. And it's
18 important that we treat property owners fairly. And I
19 think when you follow the law, both process-wise and by
20 the principles of compensation, the property owners --
21 nobody wants to have their property taken by the
22 government for a public project. It's always a painful
23 process, or almost always.

24 But nonetheless, sometimes it's the only way to
25 proceed with a project that has such great public

1 benefits. So I would be happy to answer any questions.

2 Sorry I got on my soapbox.

3 BOARD MEMBER RIE: I have a question: You said
4 you were the original author of some of these easement
5 regulations. And currently, our regulations state that
6 the applicant shall provide the board with a permanent
7 easement for the levee section in an area 10 feet in width
8 adjacent to the landward toe.

9 Now, we have situations where we may have
10 underseepage problems and we're doing a little bit more
11 flood fighting in a particular levee section than we would
12 in another levee section. And if we wanted to get more of
13 an easement than what the regulations allow, and the owner
14 of this property were unwilling to grant the easement,
15 what would be the likelihood of eminent domain being
16 successful in the case of going beyond what the Board's
17 regulations require?

18 MR. TABOR: The Board's regulations that you are
19 quoting from are encroachment regulations and not
20 regulations that affect a Board project. And a typical
21 Board project -- our real estate requirements are
22 determined by the Army Corps of Engineers. The Army Corps
23 of Engineers says that we need 10 feet beyond where the
24 landward toe would be. Then that's who the Board
25 requires, because that's what our cost-sharing obligation

1 is based upon.

2 If the Army Corps of Engineers says, "Thou shalt
3 have 30 feet landward of levee toe," then that's what
4 we're obligated to provide, because that's what our
5 agreement with the Corps says. It says, "We'll buy what
6 land the Corps tells us to buy," and that's what the
7 federal law says as well, is that the non-federal sponsor
8 will acquire those land easements as determined necessary
9 by the U.S. Army Corps of Engineers.

10 BOARD MEMBER RIE: What if we have an
11 encroachment, that's not necessarily Board project, but we
12 have an encroachment and we have an applicant who wants to
13 encroach on the levee. And there currently is not an
14 easement to our Board. And as a condition of the
15 encroachment permit, we require an easement to be
16 dedicated to our Board. What's the likelihood that we can
17 go beyond the 10 feet that's in the regulations for
18 encroachments?

19 MR. TABOR: As a matter of the Board's regulatory
20 authority?

21 BOARD MEMBER RIE: Yes.

22 MR. TABOR: I think it's a fact-specific case, and
23 I think we have to look at both California and Supreme
24 Court precedences on regulatory requirements for
25 easements. And there's both California Supreme Court,

1 U.S. Supreme Court cases.

2 And you look at what -- what is giving rise to the
3 need for the easement dedication requirement. And you
4 look at whether or not there's a fair match between the
5 burden that the encroachment is having and the
6 government's request for a dedication of an easement. So
7 it's a very fact-specific case.

8 BOARD MEMBER RIE: What if we just think it's a
9 good idea to get more?

10 MR. TABOR: You know, a government agency is --
11 needs to be defended by a record that describes the
12 factual and legal basis for what it's doing.

13 If the only reason is, it's a good idea, then that
14 may not be enough. But I think we have to articulate some
15 reasons why -- factually and legally, why a larger
16 easement dedication may be appropriate.

17 BOARD MEMBER RIE: Okay. Thank you.

18 SECRETARY DOHERTY: You said you would tell where
19 my appraiser fits into the picture.

20 MR. TABOR: Yes, ma'am.

21 SECRETARY DOHERTY: You have yours, I have mine.
22 Now how does mine fit in?

23 MR. TABOR: Well, once the government makes an
24 offer to the landowner, and the landowner disagrees on
25 value, if they have an appraisal already done, or they

1 have an appraiser that they have retained, that's the part
2 of the process the landowner says, "Hey, I got your
3 appraiser, Mr. Government Agent. I got my appraisal, and
4 he says, 'My property is worth X plus Y.'" That's the
5 time to enter in, because once again, the government
6 appraiser doesn't have all the information that the
7 landowner has. They don't have access to the landowner's
8 ideas, dreams, plans, feasibility studies for that
9 property. They may not know all the comparable sales that
10 the landowner may not [sic] have.

11 There's a situation on the Marysville-Yuba City
12 Levee Reconstruction Project a few years ago that we were
13 involved with. And we needed to take out a row of peaches
14 of a gentleman's orchard. And we valued it based upon, it
15 was -- was going to take out part of his peach orchard.
16 Well, as it turned out, those particular trees were his
17 genetic stock for a rare kind of peach. And he was able
18 to present as evidence that this wasn't just a row of
19 peach trees; this was a row of special peach trees. And
20 he was able to show us that they were, in fact, special
21 peach trees.

22 And based upon that, we were able to justify
23 paying him a higher value, because we didn't know that
24 before. They looked like peach trees to us. So that's
25 how a landowner's appraiser can come into the process.

1 You know, appraising, sure, it's based upon facts.
2 But there's a lot of art and judgment that has to be
3 exercised by an appraiser. And you give the same -- if
4 you are looking at a single-family home in a residential
5 subdivision, they are probably going pretty close. If you
6 are looking at the effect of a levee project on
7 agricultural lands in an area that's 40 miles from an
8 urban center, there may well be room for differences of
9 opinion in those kinds of appraisals.

10 And I'm not in any way passing judgment on any
11 particular appraisal or appraiser, because I'm not aware
12 of the facts here. I know that our appraisers do a sound
13 job. You know, a government appraiser trying to save
14 money for their client by giving a lowball appraisal isn't
15 doing their client a favor. Because first of all, it's
16 not consistent with the law, as I've described it to you.
17 And that's not the way you make deals with landowners.
18 You've got to treat landowners fairly.

19 BOARD MEMBER BURROUGHS: That's my next question
20 in treating landowners fairly. If a landowner has been
21 approached in a hostile manner, what recourse do they have
22 in the process?

23 MR. TABOR: Well, when I have trouble with a
24 government employee, whether they are in my department or
25 another department, and I can't work it out with that

1 government employee or an agent for a government agency, I
2 take it to their higher-ups. I find a way to elevate it
3 because it's the way government works. It's the way most
4 organizations work.

5 And usually, at higher levels, people are going --
6 people want to be aware of how their agents are being
7 perceived out there in the world. And they want that
8 information, that somebody believes that their agents have
9 treated them unfairly. And I think that's the way to get
10 your hearing.

11 SECRETARY DOHERTY: Now, if I sell you a piece of
12 land for a thousand dollars, but I know that I can save
13 the state \$500,000, would I ask you to chip in a little
14 extra from the state, let's say a 1,500 an acre because
15 I'm going to save you \$500,000 ultimately.

16 MR. TABOR: The law would say no. Because value,
17 first of all, is in the eye of the beholder. And in an
18 eminent domain trial, landowners are witnesses that can
19 testify as to the value of their property, which is likely
20 to be different than that government appraiser's opinion
21 of the value of the property.

22 Obviously, it's going -- these things can be taken
23 into consideration. And most agencies have some
24 administrative flexibility to reach out to some extent,
25 and we call those administrative settlements. But they

1 are usually a finite limit to what that flexibility is and
2 it's --

3 SECRETARY DOHERTY: But there is flexibility.

4 MR. TABOR: There is some flexibility.

5 SECRETARY DOHERTY: Okay. That's what I wanted to
6 know.

7 Thank you.

8 PRESIDENT CARTER: When -- when you use the
9 concept of higher and highest and best use, in some open
10 space situations, there are folks that say that the
11 highest and best use of some of this open space is either
12 floodplain or habitat.

13 How do you place a value on that, when that
14 involves a change in land use? Let's say, from
15 agricultural to flood, and that is a recognized highest
16 and best use? How do you place a value on that?

17 MR. TABOR: The primary method of placing value on
18 property is through comparable sales. So an appraiser
19 would look in the market place for sales of property for
20 habitat value. And probably the higher priced habitat
21 value may well be a duck club, because some people are
22 willing to pay significant amounts of money to have an
23 ownership in a duck club. And so that's one element of --
24 one way to value habitat property that comes out with a
25 high value.

1 One of the difficulties in looking at habitat from
2 a more of a less-consumptive habitat perspective, a
3 nonhunting perspective, is that sales to government
4 agencies are not considered to be comparable sales under
5 the law. Sometimes it's the only sales you have available
6 for a particular kind of use. And so sometimes they slip
7 in, because there's just nothing else that's available as
8 a comparable sale, especially when you may not be
9 acquiring the full fee value. You are acquiring something
10 less than a fee value, an easement for flowage and habitat
11 purposes.

12 Well, there's not a whole lot of good comparable
13 sales out there for sales of property for flowage
14 easements and habitat value. And so the appraiser then
15 has to use their judgment about what the fee value would
16 be, and then take some percentage of fee value to reach
17 that.

18 You know, other methods of valuation are possible
19 as well. But those tend to be more for commercial or
20 industrial properties where you look at an income stream
21 and that you can do a present value calculation too. So
22 other forms of valuation tend to come forward in more
23 complex situations -- mining situations or situations
24 where you are having to extract a resource that's the
25 highest and best use.

1 I know that probably wasn't a very satisfactory
2 answer, but that's about the best I could do. I could
3 elaborate though, if you wanted to.

4 PRESIDENT CARTER: Okay. In the case of taking
5 your concept of a revenue stream discounted at some rate
6 to a present value, the -- if a piece of property was
7 eligible for habitat, the revenue stream from some of
8 those properties can be relatively high. I know, the
9 state pays a pretty penny for getting mitigation credits
10 on a per-acre basis. Is that taken into consideration?

11 MR. TABOR: If the highest and best use, for
12 example, was a mitigation bank and the owner could show
13 that there's a -- it's reasonably likely that this
14 property could be adaptable to a mitigation bank in that
15 there's evidence that would support the uses of mitigation
16 bank, I think that certainly is something that could be
17 taken into consideration.

18 PRESIDENT CARTER: Okay.

19 BOARD MEMBER BURROUGHS: Is there a cost
20 associated with designating land as a floodway for
21 protection? Is there a ballpark figure value for that?

22 MR. TABOR: Oh, as a flowage easement?

23 BOARD MEMBER BURROUGHS: Yes.

24 PRESIDENT CARTER: You mean the value of it?

25 BOARD MEMBER BURROUGHS: Uh-huh.

1 MR. TABOR: Well, I don't think there's anything
2 in particular because it would -- may be really based upon
3 what the impact of the land owner's use of the property
4 is.

5 So let's say, for example, you are talking about
6 taking a peach crop in the Central Valley. A peach crop
7 that you could -- that may now be growing in an area and
8 you are going to -- maybe you are going the move the levee
9 so that peach orchard would then be subject to inundation.
10 You would have to look at the elevation of the peach
11 orchard and the likelihood of that peach orchard being
12 flooded at what intervals and how -- and how that would
13 affect a willing buyer's interest in that property and
14 knowing nothing about peaches other than, when they are
15 ripe, they taste pretty good.

16 I know that peaches do grow within the river
17 levees. And I know that some -- in fact, the Reclamation
18 Board is a peach farmer, believe it or not, up in that
19 neck of the woods, and that peaches can do okay. But I'm
20 sure there are other parts of the flood control system
21 where peaches would not do very well at all.

22 And so the value that would be placed on a flowage
23 easement would vary depending upon what the likelihood and
24 what the probability of an impact on that is. You know,
25 sometimes a 50 percent value is thrown around. But it all

1 depends on how the government's use, which is in this case
2 a flowage easement is going to affect the landowner's
3 highest and best use.

4 BOARD MEMBER BURROUGHS: So for instance, if a
5 farmer had land next to a levee and got repeatedly
6 flooded, and because of that, the landowner then -- the
7 farmer would have to plant an annual crop versus a
8 permanent crop, how would that be taken into consideration
9 in value?

10 MR. TABOR: Well, let's use two completely
11 hypothetical ones. Let's say it's currently in peaches,
12 and, well, let's pick another crop. How about tangerines,
13 we'll pick tangerines, because it's not likely to be this
14 situation. You are growing tangerines now, but once the
15 property is subject to flowage, all they can grow is
16 alfalfa. So the appraisal issue then is what is the value
17 of that land being able to grow tangerines on it versus
18 the value of a property of alfalfa that's going to get
19 inundated at some frequency? Yes, it's going to be a
20 lower value. I couldn't give you a percentage because,
21 first of all, it's a hypothetical. Second of all, it's
22 going to be based upon how it affects the value.

23 And I would hope that tangerine property is more
24 valuable than alfalfa land. But I may be wrong.

25 BOARD MEMBER BURROUGHS: Thank you.

1 PRESIDENT CARTER: Any more questions?

2 VICE PRESIDENT HODGKINS: I have a hypothetical
3 where, two years ago -- for purposes of telling the story,
4 I owned a piece of property that was protected by a levee.
5 Okay? And adjacent to me, development is taking place.

6 It is subsequently determined that the area where
7 the development is taking place and where I am, the
8 property does not have hundred-year flood protection, the
9 agency decides to construct a setback, which now leaves my
10 land inside the floodplain. So it takes it from
11 potentially having been developable to no longer being
12 developable.

13 How are you going to handle that kind of
14 situation?

15 MR. TABOR: I think you would go through the same
16 basic analysis that I went through. You would look at
17 highest and best use. You would look at, before the
18 public project, what that property would be reasonably
19 adaptable to be in the future. You would look at what its
20 current use is. But you would look at what sorts of uses
21 is reasonably adaptable and what the probability of that
22 is, and how that would affect what a willing buyer would
23 pay.

24 VICE PRESIDENT HODGKINS: Okay.

25 PRESIDENT CARTER: Any more questions?

1 Very good. Thank you very much.

2 MR. TABOR: All right. My pleasure. Thank you.

3 PRESIDENT CARTER: Let's go ahead and take a
4 ten-minute break. It's 4:34, so we'll be back here at
5 4:43.

6 (Thereupon a break was taken in
7 proceedings.)

8 PRESIDENT CARTER: Okay. We are on Item 13, Board
9 Comments and Task Leader Reports.

10 This is probably the -- these are the real
11 diehards in the audience. This is probably the most
12 public participation we've had on these items in the last
13 year and a half.

14 So are there any Board comments or task leader
15 reports this month?

16 SECRETARY DOHERTY: Mr. Bundy is retiring. You
17 know that. He's head of the Sacramento River Conservation
18 Area Forum. And they're going to be hiring a new manager.

19 PRESIDENT CARTER: Okay.

20 Rose Marie?

21 BOARD MEMBER BURROUGHS: Yes, I did attend the
22 interagency meeting on Wednesday, and I was going to let
23 Jay report on it.

24 BOARD MEMBER RIE: We met again today for the
25 Delta Levee Subventions Subcommittee. And we're

1 continuing to work on priorities and policies of the
2 upcoming year of 07/08. We're going to get a lot more
3 money in 07/08 for Delta levee subventions.

4 And I'm still looking for input from the Board as
5 to the Rec Board's priority projects. So again, if anyone
6 has anything they would like to see, including the
7 priorities, please let Jay Punia know. And we'll probably
8 bring the policies and procedures and the guidelines for
9 delta levee subvention priority funding in July.

10 That's it.

11 PRESIDENT CARTER: Did you have anything else you
12 wanted to mention?

13 BOARD MEMBER RIE: Not at this time.

14 PRESIDENT CARTER: Okay. Butch?

15 VICE PRESIDENT HODGKINS: Nothing.

16 PRESIDENT CARTER: Nothing?

17 I thought Professor Bea's comments on beliefs and
18 values was germane to the Rec Board strategic plan.

19 VICE PRESIDENT HODGKINS: Well, when we get to the
20 agenda of our next meeting or two meetings, I would hope
21 we might, if we have two meetings, we'll decide to focus
22 on the strategic plan at the next meeting. But we're not
23 there yet on the agenda.

24 PRESIDENT CARTER: Great. Okay.

25 Mr. Punia?

1 GENERAL MANAGER PUNIA: General Manager's Report.

2 Jay Punia.

3 A few items of interest. Status of permits.

4 Since January 1st, 2007, we have received 72 applications.

5 And since January 1, 2007, 30 permits have been issued.

6 There are -- overall, there are still 41 permits pending
7 on file.

8 I think most of the Board members --

9 BOARD MEMBER RIE: I have a question on that.

10 GENERAL MANAGER PUNIA: Yes.

11 BOARD MEMBER RIE: At our last Board meeting, you
12 were going to check on any outstanding permits prior to
13 2005. Were you able to get that information?

14 GENERAL MANAGER PUNIA: Yes. That's 78 active
15 permits are on file since that date.

16 BOARD MEMBER RIE: So we have 78 permits from
17 prior to the 2005 that are still open?

18 GENERAL MANAGER PUNIA: That's correct. And 41
19 since January 1, 2007.

20 VICE PRESIDENT HODGKINS: Can I make sure you're
21 communicating. You're asking about open permits, meaning
22 permits where there's been an application but we
23 haven't --

24 GENERAL MANAGER PUNIA: That's correct. It's
25 applications which are not -- have not gone into the

1 permit, that the permit hasn't been issued for those
2 applications.

3 VICE PRESIDENT HODGKINS: There are how many?

4 GENERAL MANAGER PUNIA: 78 since January, 2003. I
5 think that's the date that the Board asked last time. And
6 41 since January, 2007. So these are the applications --
7 sometime the applicant hasn't finalized the application;
8 there's still information pending. Or due to some reason,
9 they are not pursuing it, to go ahead with the project.
10 But they are open applications, which hasn't been
11 submitted to complete the permits open.

12 SECRETARY DOHERTY: But don't they expire after
13 one year, after it's been granted?

14 GENERAL MANAGER PUNIA: No. The application stays
15 in -- there's no expiration date on the applications.
16 Steve may have more clarification on this.

17 CHIEF ENGINEER BRADLEY: That one-year only
18 applies after the permit is issued.

19 SECRETARY DOHERTY: That's what I meant. But if
20 the permit has been issued --

21 CHIEF ENGINEER BRADLEY: They have to start work
22 within one year. Even then, we tend to accommodate the
23 applicant. But what Jay is saying, these are applications
24 that have not -- where a permit has not been issued yet.

25 SECRETARY DOHERTY: The 78 has no -- they have no

1 permits?

2 GENERAL MANAGER PUNIA: No permits. They are the
3 application. They haven't completed the requirements of
4 the California Environmental Quality Act, or there's
5 something pending so they haven't fulfilled their
6 application so we can either bring it to the Board or
7 issue a permit.

8 BOARD MEMBER RIE: I was wondering if we could
9 start looking at some of the those old permits and
10 following up with the applicant to get whatever documents
11 were missing. And if they need to be closed or if they
12 need to be brought to the Board for a denial or an
13 approval, maybe we could start getting some of the those
14 off the books. Just seems like a lot of permits have just
15 been hanging out there for four years.

16 GENERAL MANAGER PUNIA: I take it, staff has --
17 they provided me a spreadsheet showing the status of why
18 they are not completed. I will revisit that and see what
19 we can do about these and report back at the next Board
20 meeting.

21 BOARD MEMBER RIE: Okay. Thank you.

22 GENERAL MANAGER PUNIA: American Society of Civil
23 Engineers and Society for American Military Engineers
24 Conference on July 24th through 26th. As a Board
25 member -- I think we have received paperwork from some of

1 you, but if you haven't submitted it, please give the
2 paperwork to Lorraine so that we can process the
3 paperwork.

4 There is going to be a session on Friday
5 July 27th also. That session is being sponsored by DWR,
6 and the Rec Board will cosponsor it, to discuss what's the
7 adequate level of protection for urban areas. So please
8 mark your calendars from July 24th through 27th.

9 Quick update on the Sacramento Area Flood Control
10 Agency's permit. That permit was issued to this
11 Sacramento Area Flood Control Agency. And the letter
12 requesting the determination from the U.S. Army Corps of
13 Engineers was also forwarded to the U.S. Army Corps of
14 Engineers on the SAFCA Natomas cross-canal permit.

15 I reported last time that the Corps has sent us a
16 letter that they have received some of the inspection
17 reports from the Department of Water Resources. We worked
18 with the Department of Water Resources and provided those
19 inspection reports to the U.S. Army Corps of Engineers.

20 The Corps had also sent us a letter informing that
21 several districts are not in compliance with the U.S. Army
22 Corps of Engineers standard. Based upon that letter, we
23 sent notification to the local levee maintaining agencies,
24 asking them to submit their plans and so that we can
25 provide those plans to the U.S. Army Corps of Engineers to

1 outline how they are going the address those deficiencies.

2 So far, we have received plans for three or four
3 agencies. And we are expecting that we will be getting
4 additional plans so that we can provide those plans within
5 three months' time allotted to us and provide those plans
6 to the U.S. Army Corps of Engineers.

7 Staff suggested that they need a break for the
8 month of August, that if it's acceptable to the Board that
9 we shouldn't have a meeting on due to the month of August.
10 That was discussed with the president and the vice
11 president. They suggested that we should explore other
12 options to improve the deficiencies and productivity of
13 the staff.

14 The two options which are on the table, to change
15 the frequency of the Board meetings from monthly to,
16 maybe, month and a half, or a two-month meeting every
17 other month. So I have passed this information to the
18 staff. We are discussing it. I haven't heard back from
19 the staff with their recommendation. So once we have a
20 staff recommendation, we will be presenting to the Board
21 and seeking the Board's guidance on that.

22 PRESIDENT CARTER: So just in case -- just as a
23 clarification, just in case that doesn't make intuitive
24 sense, be more productive with fewer meetings, the comment
25 was that we would like to have August off because we can

1 catch up, because we spend a lot of time preparing for the
2 Board meetings and preparing the staff reports and
3 whatnot. And if we don't have a Board meeting, we can do
4 more work. We can spend more time on doing the permits
5 and the projects. So that was the genesis of this
6 discussion.

7 I think we're constantly -- the Board is
8 constantly looking for ways to be more productive to
9 process these permits on a more timely basis and be more
10 efficient with everybody's time.

11 So that's the goal of this. Just wanted everybody
12 to be clear about why we're considering a 45-day period or
13 a 60-day period between Board meetings.

14 SECRETARY DOHERTY: So that means that if
15 something comes into me last night or this morning, I
16 don't have to look at it, because they had six weeks to
17 get it in, right? 45 days to get it in?

18 GENERAL MANAGER PUNIA: If we change the
19 frequency, then I think we will be more effective in
20 meeting our deadline, that we need to have this report
21 from the staff and we will be -- provide information well
22 in advance to you to review that information.

23 SECRETARY DOHERTY: Okay.

24 GENERAL MANAGER PUNIA: So we are just looking at
25 all these options. We don't have a recommendation at this

1 time. But we will give it a little bit more thought and
2 come back to the Board at some later date.

3 PRESIDENT CARTER: So we will defer the decision
4 on the August meetings until we get staff's feedback on
5 those proposals.

6 BOARD MEMBER RIE: If I could comment on that, my
7 concern would be that if we skip a month, we're going to
8 have a lot more items and that will require us to meet for
9 possibly 10 or 12 hours in one day.

10 PRESIDENT CARTER: Or maybe two days.

11 BOARD MEMBER RIE: If we're going to have that
12 many items built up, I think it would be preferable to
13 meet over two days rather than be required to sit here for
14 12 hours in one day. I don't think we could do it. That
15 would be hard.

16 BOARD MEMBER BURROUGHS: From a Board's
17 perspective, on my own personal [sic], I would like to see
18 a little more time extended between Board meetings rather
19 than taking a whole month off just during the summer,
20 because it's been evident on how we receive our
21 information that we're not getting the information on
22 time.

23 And I agree with what Teri said, that I'm
24 concerned about just totally taking a whole month off,
25 because we'll have -- catchup work to do. And we need to

1 continue business. But I think if it's necessary -- and I
2 think I would refer that to staff, to decide whether or
3 not we need more time between Board meetings to prepare
4 work and evaluation and all the other things that are
5 required, including sending paperwork to the members.

6 PRESIDENT CARTER: Okay. Just be clear, I mean,
7 the direction on this is to be more productive, not less
8 productive. And it -- it may require a two-day Board
9 meeting instead of every two months, instead of a one-day
10 Board meeting every month.

11 So we just need to get -- we need to have staff
12 explore and get their feedback on how they think they can
13 be most productive.

14 BOARD MEMBER BURROUGHS: I'm agreeable to whatever
15 is best to get -- to be most beneficial and productive.
16 So I will be available in whatever direction we take.

17 PRESIDENT CARTER: Okay.

18 GENERAL MANAGER PUNIA: Board Member Rose Marie
19 and I attended the Interagency Collaborative Meeting. The
20 main topic of discussion was the U.S. Army Corps of
21 Engineers vegetation policy. I think various agencies are
22 working on sending comments back to the U.S. Army Corps of
23 Engineers.

24 And DWR also give us a quick briefing on the
25 critical erosion repair site. I think the main focus is

1 on the Sacramento system. There is no work planned for
2 this fiscal year in the San Joaquin system.

3 I think that's my report. Thank you.

4 PRESIDENT CARTER: Any questions for General
5 Manager Punia?

6 Thank you.

7 Okay. We'll move on to Item 15, which is the
8 future agenda. In the packet that was passed out today,
9 that you received today, there is a draft agenda for
10 June 15th. The first page, which is -- will look
11 familiar, and it's what we have normally on the first page
12 every month.

13 We have applications, Yuba River Basin Project and
14 the Star Bend Setback Levee in Sutter County.

15 Property management. We had deferred that
16 agreement from last month pending feedback from DWR
17 regarding what their intentions are of the long-term use
18 of the ag land in there.

19 We have had for us, for quite some time, Item 10.
20 Reggie Hill can come to talk to us with some concerns with
21 regard to the lower San Joaquin River Flood Control
22 Project. So we want to -- we have put him off at least
23 once. So we want to try to get him on the agenda.

24 We put Ricardo Pineda on the FEMA map
25 modernization project.

1 And then the Board reports.

2 Based on today, we also have -- well, let's see,
3 potentially the Three Rivers Levee Improvement Authority
4 Segments 1 and 3.

5 We had talked about the Section 104 letter coming
6 back in June as well, that we -- that we had addressed
7 last month.

8 What other items do we have on the list? Are
9 there other things that Board members --

10 BOARD MEMBER RIE: There could be an informational
11 briefing on Delta Levee Subventions, but that wouldn't
12 come up until July.

13 PRESIDENT CARTER: July? Okay.

14 BOARD MEMBER RIE: So you could put that on the
15 future agenda that you would attach to next months' Board
16 package.

17 PRESIDENT CARTER: The Segment 2 of the Feather
18 River is scheduled for July, I believe.

19 GENERAL MANAGER PUNIA: Yes. Tentatively July in
20 setback two.

21 And this Segment 1 and 3, I think Scott may have
22 to address the Board. I think he's proposing that in
23 their schedule, an early meeting may fit better or -- I
24 think I will let Scott talk about that. Our regular
25 meeting is on June 15th. We can bring it at that time if

1 that fits into your schedule.

2 MR. SHAPIRO: Scott Shapiro, Three Rivers Levee
3 Improvement Authority. Begging the Board's indulgence,
4 Jay mentioned Feather River Segment 2 in July. That is
5 when we had hoped the Board would consider our permit. We
6 have traditionally briefed the Board on our permits the
7 month before, so you are not hearing all of it for the
8 first time at the Board meeting.

9 And if that's still the pleasure of the Board,
10 since it is a somewhat more controversial permit in light
11 of the setback -- let's be honest, that's an issue here --
12 our preference would be to still brief the Board at the
13 June meeting, which would give you time to ask questions.
14 And if we have assignments in the in-between months, we
15 could do that.

16 As to Segments 1 and 3, we have calendared it out.
17 And it's really tight to push it to the June 15 meeting.
18 We would request a special meeting that first full week in
19 June, which would be June 4, 5, 6, something like that.
20 We recognize your schedules are busy, but it leaves very
21 little room for error. If it gets pushed to June 15th,
22 this following your Board action, assuming you grant the
23 permit, then we have to finalize the 408 letter, it has to
24 go to the Corps, the Corps is to send the packet up to the
25 division, and at the headquarters, they need to review it,

1 then it needs to come back, then we need to award a
2 contract, and then we need to issue a notice to proceed,
3 then we have to get off the levees by the November 1.

4 PRESIDENT CARTER: So you would like to meet
5 before what date?

6 MR. SHAPIRO: My -- our preference would be a week
7 before, which would be the 4th, 5th, or 6th of June,
8 Monday, Tuesday, or Wednesday. We recognize that it's
9 tough to get your schedules together, but that would be
10 the request, if it's possible.

11 SECRETARY DOHERTY: What day is the first of June?

12 MR. SHAPIRO: It is a Friday.

13 Technically, if staff issued an agenda on Monday,
14 we could meet Friday, the 1st. That's not all that
15 feasible to have happen, so we're recognizing it will take
16 a little bit more time. And that's why we pushed it to
17 the next meeting.

18 GENERAL MANAGER PUNIA: Scott, staff had mentioned
19 if the 15th, at the June meeting, can accommodate your
20 schedule, then we don't have to schedule another meeting.
21 That would be our desired preference. But if it doesn't
22 meet your schedule, I think the Board will -- the Board
23 will consider your request.

24 MR. SHAPIRO: All I can say is, it takes a lot of
25 wiggle room out of our schedule if we push it to the 15th.

1 Obviously, we don't control a lot of the variables. And
2 the more time we have, the more control we have over the
3 variables.

4 I can't tell you, we can't do it if we do it on
5 the 15th. I'm just telling you that we originally
6 scheduled this for last month, you may recall. So we are
7 now looking at 60 days later than our original schedule.

8 PRESIDENT CARTER: Could we do the -- what first
9 question. Is the Board available the week of June 4th?

10 BOARD MEMBER RIE: I'm available June 1st.

11 SECRETARY DOHERTY: I'm available June 1st.

12 Are you available June 1st?

13 BOARD MEMBER RIE: Yes, I have a question for
14 Scott Morgan.

15 PRESIDENT CARTER: I can't do it June 1st because
16 we don't have enough time.

17 BOARD MEMBER RIE: We might. This issue has come
18 up before, where we were in the middle of a discussion and
19 we tabled an item in the past. And I was wondering, since
20 we never took a motion or finished a motion or executed a
21 motion for this particular item -- we agreed to talk about
22 it during the future agenda -- can we make a motion to
23 table the discussion and keep it, the hearing open, until
24 a date?

25 PRESIDENT CARTER: Basically continue this

1 meeting?

2 BOARD MEMBER RIE: Yeah.

3 LEGAL COUNSEL MORGAN: The problem is, you are
4 going to add a lot of stuff to the agenda in terms of the
5 408 letter. I think it would be better to have an agenda
6 specifically for that. The 408 letter that's going out
7 right now, I mean, the Board's going to have to agendize
8 it specifically authorizing the -- approving the state's
9 acceptance of the project, basically the ABC agreements
10 that the Corps requires.

11 So I think we should -- the Board should agendize
12 that. Otherwise, yeah, if it was just a matter of
13 approving this permit, I think you are right. But I think
14 because of what Mr. Shapiro has mentioned, I think that
15 needs to be agendized separately.

16 BOARD MEMBER RIE: Couldn't we approve the letter
17 to the Corps with the approval of the permit?

18 LEGAL COUNSEL MORGAN: Well, unfortunately what
19 the Corps is requiring is going to be a statement that the
20 state of California has made certain -- is going to make
21 certain assurances to the federal government. And the
22 Board needs to take an action to do those things.

23 BOARD MEMBER RIE: Okay.

24 PRESIDENT CARTER: Mr. Brunner or Mr. Shapiro, if
25 we were to continue this meeting, we could potentially

1 take action on the permit. But what Counsel is saying is
2 that we really couldn't take action on the 408 letter
3 without formally noticing another meeting.

4 MR. SHAPIRO: Our critical timeline is 408, not
5 the permit. We do not intend to start construction until
6 end of July, August. It's the 408 permit -- it's the 408
7 approval that's the issue.

8 PRESIDENT CARTER: Given that we are at May 18th,
9 the 1st really doesn't work, because we need to
10 essentially have -- we need to send the agenda out 11 days
11 prior to the meeting day.

12 Is that 11 calendar days or 11 business days?

13 LEGAL COUNSEL MORGAN: 11 calendar days.

14 PRESIDENT CARTER: So actually, we could do it the
15 1st, potentially.

16 LEGAL COUNSEL MORGAN: But as Mr. Shapiro says,
17 the notice would have to go out Monday. And I don't think
18 logistically we can do that. I don't think we have a
19 room, necessarily, reserved. Well, I know we don't have a
20 room reserved. But it takes a little while to get the
21 agendas out, not just printed out, but also to send them
22 to the printers and then mailed out. So one day probably
23 won't do it.

24 PRESIDENT CARTER: Can't do it.

25 And we're not available any time during the week

1 of the 4th?

2 SECRETARY DOHERTY: Monday the 4th?

3 PRESIDENT CARTER: Monday the 4th. Are we
4 available Monday the 4th?

5 VICE PRESIDENT HODGKINS: I am.

6 BOARD MEMBER RIE: Sure.

7 BOARD MEMBER BURROUGHS: I'm not sure. I have a
8 trip planned and I have to double check the date, the
9 exact date, that I know we'll be in Texas.

10 PRESIDENT CARTER: Okay. All right.

11 BOARD MEMBER BURROUGHS: But I would be happy
12 to -- as soon as possible, the earliest convenient date to
13 meet earlier if we need to. But I will have to call home
14 to find out for sure.

15 PRESIDENT CARTER: So would it -- would you mind
16 if we then kind of tentatively set June 4? We'll
17 tentatively set up June 4, and let's work towards that.

18 STAFF ASSISTANT PENDLEBURY: Ben, are we talking
19 about Marysville?

20 PRESIDENT CARTER: No.

21 STAFF ASSISTANT PENDLEBURY: Talking about
22 Sacramento?

23 BOARD MEMBER RIE: Here.

24 PRESIDENT CARTER: How about Colusa?

25 (Laughter.)

1 MR. SHAPIRO: I will second.

2 SUPERVISING ENGINEER FUA: JOC.

3 PRESIDENT CARTER: The fair's in town that week.
4 Maybe we could go to the fair.

5 BOARD MEMBER RIE: And can I put in a request that
6 it be scheduled no earlier than 9:30 in the morning.

7 PRESIDENT CARTER: Okay. Yes. You can make that
8 request. All right.

9 So we'll -- and there will be -- we're going to
10 have two items on the agenda.

11 Are we going to have the permit and the 408
12 letter?

13 VICE PRESIDENT HODGKINS: Please.

14 PRESIDENT CARTER: Does that give staff enough
15 time to review the Corps letter and coordinate with Three
16 Rivers with regard to what kind of an easement you are
17 going to -- you can settle on?

18 SUPERVISING ENGINEER FUA: It really depends upon
19 the negotiation between the applicant and staff on that
20 50-foot setback.

21 PRESIDENT CARTER: Correct. So does that give you
22 enough time to do that?

23 SUPERVISING ENGINEER FUA: It depends whether we
24 can arrive at a reasonable, you know, way to resolve that.

25 PRESIDENT CARTER: Let me ask you another way.

1 How much time do you need to resolve that?

2 MR. SHAPIRO: We would be happy to meet any time
3 next week with the maps and the aerials and talk about
4 what specific areas the staff is looking for. And then we
5 can take that back and consider it. So there's really --
6 if we have the materials, it would relatively easy to
7 meet. We could probably even do a tour with staff.

8 MR. BRUNNER: Three Rivers is prepared to do
9 whatever we need to do, bring the aerials, photos, sit
10 down and talk, and work with the staff to make it happen.

11 PRESIDENT CARTER: I understand.

12 MR. BRUNNER: Your proposal that you had, that you
13 voted down, for us, was potentially workable. Maybe other
14 proposals will be workable too.

15 PRESIDENT CARTER: I'm hearing, we're not that far
16 away.

17 BOARD MEMBER RIE: We could always cancel if we're
18 not ready.

19 SUPERVISING ENGINEER FUA: I was going to say
20 that. If we're not ready, we can always say, "We're not
21 ready. We need to cancel."

22 PRESIDENT CARTER: Let's put both items on the
23 agenda.

24 BOARD MEMBER BURROUGHS: Mr. President, there was
25 discussion today about having enough time for a Corps

1 comment. Do -- before we set this meeting date, I would
2 like to make sure that the Corps is available to present
3 to the Board their comments as well.

4 CHIEF ENGINEER BRADLEY: We have Corps comments.
5 They are in your packet.

6 PRESIDENT CARTER: The Corps has supplied written
7 comments. You are asking for someone to attend the
8 meeting to answer questions?

9 BOARD MEMBER BURROUGHS: That's correct. As well
10 as, we did talk about the .04 [sic] and how the Corps is
11 going to interpret that in the future as well. I think
12 that should be taken into consideration.

13 PRESIDENT CARTER: Yeah. So we'll -- the staff
14 should make the Corps aware. And actually, I discussed
15 with Jim Sandner this afternoon; he said that he -- what
16 he said is he should make time in his calendar to come to
17 the Rec Board meetings on a regular basis. So maybe we
18 can encourage him to try and carve out some time on
19 Monday, June 4th, for this discussion.

20 SECRETARY DOHERTY: Now, we mentioned 104 letter
21 and 408. Now which? Both?

22 PRESIDENT CARTER: No, 408.

23 SECRETARY DOHERTY: Well, somebody mentioned 104
24 and I thought -- I just want to make sure I got it all
25 straight.

1 MR. SHAPIRO: We appreciate you considering the
2 June 4th. We do hope the schedule works out. We do
3 appreciate you thinking about the Segment 2 briefing,
4 again, at the regular meeting in June. I think it will
5 make for a much better dialogue instead of coming before
6 you in June for the first time.

7 PRESIDENT CARTER: Agreed.

8 VICE PRESIDENT HODGKINS: I want to be sure I
9 understand. The 104 letter for Segment 2; you are okay
10 with July?

11 MR. SHAPIRO: We're not the sponsor on the Section
12 104 credit letter. It's Yuba County Water Agency.

13 The issue is that we give the Corps as much time
14 as possible to process that before we start construction,
15 which is slated for September 1. So I think the June
16 regular meeting would be the best time to do the Section
17 104 letter, recognizing it's not ours. But July would be
18 basically saying to the Corps, "You have 40 days for the
19 104 letter request." We've already received that one.
20 That's already in.

21 So you are talking about the Segment 2, 104, that
22 a month ago was voted down by the Board; correct?

23 VICE PRESIDENT HODGKINS: That is correct.

24 PRESIDENT CARTER: That is on the draft June
25 agenda as Item 8.A.

1 VICE PRESIDENT HODGKINS: That's what I thought.
2 You earlier said it was July. And I'm trying to fit in a
3 committee meeting.

4 BOARD MEMBER BURROUGHS: Is there a second date in
5 case that one date doesn't work for me?

6 PRESIDENT CARTER: Do we have another date that
7 week that works, Lady Bug?

8 SECRETARY DOHERTY: No. Everything else is
9 booked. I will be out of town on Tuesday.

10 PRESIDENT CARTER: Okay. Anybody else have a
11 conflict the rest of that week?

12 BOARD MEMBER RIE: I have a conflict on the 7th.

13 PRESIDENT CARTER: Which is what day?

14 MR. SHAPIRO: Thursday.

15 BOARD MEMBER RIE: I have a conflict on Wednesday,
16 the 6th.

17 PRESIDENT CARTER: The 6th.

18 Butch?

19 VICE PRESIDENT HODGKINS: The 6th, I have a
20 conflict. 5th is okay. Thursday the 7th is okay.

21 SECRETARY DOHERTY: Friday the 8th?

22 VICE PRESIDENT HODGKINS: And the 8th is okay.

23 SECRETARY DOHERTY: I'm open on the 8th.

24 BOARD MEMBER BURROUGHS: So the two dates are the
25 5th or the 8th?

1 PRESIDENT CARTER: Monday the 4th or Friday the
2 8th?

3 BOARD MEMBER RIE: I think I might have a T-ball
4 game that day that I can't miss.

5 SECRETARY DOHERTY: What time are they playing in
6 the afternoon?

7 BOARD MEMBER RIE: Yeah, at 5:00.

8 SECRETARY DOHERTY: Oh, you would be home.

9 (Laughter.)

10 MR. SHAPIRO: Member Rie, what league are you in,
11 because I'm too old for T-ball.

12 BOARD MEMBER RIE: You know, they make the parents
13 be part of the team too.

14 PRESIDENT CARTER: Very good.

15 So as far as the June agenda, any other additions
16 to that or changes?

17 VICE PRESIDENT HODGKINS: I still am unclear about
18 whether the 104 letter for Segment 2, the setback is
19 coming back to us in July or June. Because I think the
20 subcommittee meeting to discuss alignment and whatever
21 other issues may come up should occur before that letter
22 comes back before this Board.

23 PRESIDENT CARTER: It's --

24 VICE PRESIDENT HODGKINS: Okay. And I know that's
25 Yuba County Water Agency. But I can't imagine that it

1 makes a lot of difference to them whether it goes in June
2 or July.

3 MR. SHAPIRO: Except that -- Butch, you may know
4 more about this than I, from your processing of 104
5 credits with SAFCA.

6 But if it's issued on July 20th, not knowing what
7 the date is of the July meeting, and we're starting
8 construction on September 1, is five weeks enough for the
9 Corps to process a Section 104 credit letter? Because the
10 letters have to be processed to completion before
11 construction starts?

12 VICE PRESIDENT HODGKINS: I see Steve shaking his
13 head "no," and I do not know.

14 CHIEF ENGINEER BRADLEY: Yeah, five weeks is
15 pretty quick for the Corps to do -- to make a decision.

16 VICE PRESIDENT HODGKINS: Anything.

17 (Laughter.)

18 MR. SHAPIRO: And the impact, again, of not having
19 it approved is that the state of California doesn't get
20 credit for all the dollars that Three Rivers would spend
21 starting September 1.

22 PRESIDENT CARTER: And I know that in our
23 executive committee meeting, the DWR exec was anxious to
24 have it come back before the Board, and they specifically
25 requested June.

1 VICE PRESIDENT HODGKINS: So it's coming in June?
2 Okay. That makes sense to me. But it is on that agenda
3 and we need to schedule a committee meeting before it
4 comes back.

5 PRESIDENT CARTER: Which means if it's a public
6 subcommittee meeting, you don't have a lot of time.

7 VICE PRESIDENT HODGKINS: That's correct.

8 BOARD MEMBER RIE: President Carter, can we get
9 back to you on the schedule for that special meeting?

10 VICE PRESIDENT HODGKINS: We can do that outside
11 of the room. We don't have to hold up this agenda for
12 that.

13 PRESIDENT CARTER: Special meeting? Are you
14 talking about the --

15 BOARD MEMBER RIE: The Three Rivers Special
16 Meeting?

17 PRESIDENT CARTER: Not the sub committee.

18 SECRETARY DOHERTY: What's the date of the
19 subcommittee?

20 BOARD MEMBER RIE: The special meeting.

21 PRESIDENT CARTER: Special meeting. Is there
22 something to get back to us on?

23 BOARD MEMBER RIE: Have we decided on a date?

24 PRESIDENT CARTER: First choice is the 4th, and
25 second choice is the 8th. And it will be scheduled at

1 9:30 or 10 o'clock in the morning. Either of those two
2 days.

3 SECRETARY DOHERTY: Butch, do we have a special
4 subcommittee meeting in Marysville in June?

5 VICE PRESIDENT HODGKINS: Yes.

6 SECRETARY DOHERTY: Oh. June what?

7 PRESIDENT CARTER: Butch is going to get back to
8 you on that.

9 VICE PRESIDENT HODGKINS: My tendency is to have
10 it whatever day the Board meeting's going to be, try and
11 do it the same day in the afternoon, or -- no, we'll do
12 the other day because we can still get the agenda out,
13 providing we know for sure when the Board meeting is.

14 PRESIDENT CARTER: Any other comments on the June
15 agenda?

16 BOARD MEMBER RIE: No.

17 PRESIDENT CARTER: Okay. Then that's it. We are
18 adjourned.

19 BOARD MEMBER BURROUGHS: Wait. Before you
20 adjourn, I have four letters that were submitted to the
21 Board in my packet. And I would like to have staff
22 comment from legal counsel as well as any comments from
23 the staff on each one of these letters.

24 PRESIDENT CARTER: Right now?

25 BOARD MEMBER BURROUGHS: It's part of our agenda.

1 Yeah. I mean, it's part of our packet today.

2 PRESIDENT CARTER: Okay. Which letters are you
3 specifically referring to?

4 BOARD MEMBER BURROUGHS: Each one. I'd like
5 comment -- this one is addressed to Jay Punia from Rex
6 Archer dated Wednesday, May 9th.

7 The second one is to Scott Morgan, from Rex
8 Archer.

9 The third one is the -- also to Jay in regards to
10 Scott Shapiro.

11 And the third [sic] one is from Bob Naylor dated
12 May 3rd to the Board.

13 LEGAL COUNSEL MORGAN: I will dispense with mine.

14 Very quickly, I didn't realize this was in the
15 Board packet. But yes, Rex Archer did e-mail me,
16 requesting an opinion on the Mello-Roos Act as it relates
17 to the things that Three Rivers were doing.

18 I responded to Mr. Archer telling him that I
19 didn't give legal advice to people other than the
20 Reclamation Board. That was the extent of my response.

21 BOARD MEMBER BURROUGHS: Okay.

22 And do you have any comments to the Board in
23 regards to the information on this letter?

24 LEGAL COUNSEL MORGAN: Not really. Generally, the
25 issues that he's raising are not exactly pertinent to

1 what -- decisions the Board's going to be making.

2 If he's alleging a misuse of the Mello-Roos
3 process for raising funds or the best use of the funds,
4 that's an issue that he needs to address with Three
5 Rivers. The Board doesn't audit Three Rivers, and it is
6 not in an oversight role in terms of Mello-Roos funds that
7 are being collected.

8 BOARD MEMBER BURROUGHS: Thank you.

9 PRESIDENT CARTER: I'm having a tough time finding
10 those letters.

11 BOARD MEMBER BURROUGHS: They are in the very back
12 of the packet.

13 STAFF ASSISTANT PENDLEBURY: Very last, under
14 miscellaneous letters.

15 PRESIDENT CARTER: Miscellaneous letters I have,
16 are two from the FWA and the Reclamation News Release and
17 a DWR letter.

18 Jay, do you want to comment on that?

19 GENERAL MANAGER PUNIA: I could read the letter
20 and respond back to Board Member Rose Marie. But I have
21 talked to Mr. Archer and we discussed, and I responded to
22 his various questions. But whether this was discussed,
23 I'm not up to speed. I need to get back to you at a later
24 date.

25 PRESIDENT CARTER: Which other letter, Rose Marie?

1 BOARD MEMBER BURROUGHS: This one is from Bob
2 Naylor, dated May 3rd.

3 GENERAL MANAGER PUNIA: We have received this
4 letter from Mr. Bob Naylor, attorney for Mr. Thomas Rice.
5 We have discussed the issue with Mr. Naylor but we haven't
6 provided a written response to him at this time.

7 BOARD MEMBER BURROUGHS: Okay. Well, I would like
8 to have legal counsel as well as staff read the letter and
9 respond to me on their comments on it, please.

10 SECRETARY DOHERTY: We're asking them to respond
11 with comments, but what if we don't like what he sends out
12 as comments.

13 BOARD MEMBER BURROUGHS: What if we don't like
14 what?

15 SECRETARY DOHERTY: Are you asking Mr. Punia to
16 send out a response to this?

17 BOARD MEMBER BURROUGHS: No. I'm asking for a
18 response, any comments on the information that's in these
19 four letters.

20 GENERAL MANAGER PUNIA: Maybe I can just clarify a
21 little bit. They're proposing that they are extracting
22 the information from the EIR and then providing the
23 information that the setback levee proposed by TRLIA is
24 not cost effective, but the alternatives selected by TRLIA
25 is based upon the best alignment, based on the

1 geotechnical information, and it's costing more. So they
2 are just pointing this to the Board, that there are other
3 options which can accomplish the overall goals with a
4 lower cost.

5 BOARD MEMBER BURROUGHS: That's my point.

6 PRESIDENT CARTER: Okay. And Mr. Naylor addressed
7 the Board, stating that today, during public comment.

8 SECRETARY DOHERTY: And I had a comment on that
9 letter. Why, if the strengthen-in-place was good and all
10 the tests and the studies were done, are you now saying it
11 was no good? So were we honest in the first place by
12 saying the levees were okay, and now we're saying, no,
13 they're not, so now we need a setback. Because that adds
14 up to 348 million.

15 But that's why I'm saying, I think this has to be
16 addressed. But we can't -- I don't want to tell Manager
17 Punia to answer that for me, because I may not like what
18 he says. And I might want input on that letter.

19 PRESIDENT CARTER: I think this particular issue
20 is really going to be part of the subcommittee discussion.
21 Rose Marie, if you are interested in participating in
22 that, definitely, if you can, attend the subcommittee
23 meeting. Because that --

24 SECRETARY DOHERTY: Is that allowed?

25 PRESIDENT CARTER: Absolutely. It's a

1 publicly-noticed subcommittee meeting.

2 SECRETARY DOHERTY: Oh. All right.

3 PRESIDENT CARTER: Publicly-noticed subcommittee
4 meeting. So all Board members are welcome.

5 And that should definitely be part of the
6 discussion of that subcommittee. I think levee alignment
7 will be a key element of that discussion.

8 Was there another one, Rose Marie, or did we get
9 them all?

10 SECRETARY DOHERTY: Family Water Alliance referred
11 to Del Rio and they haven't come back with their proposal
12 again.

13 BOARD MEMBER BURROUGHS: There was one more in
14 regards to -- date of May 9th, from Rex Archer to Jay
15 Punia regarding the giant boulders and the slurry wall.

16 And if you want -- if you want to put this back on
17 the agenda for next meeting, that's fine.

18 GENERAL MANAGER PUNIA: I haven't provided a
19 written response to these letters. We are getting too
20 many letters from Mr. Archer, but I have discussed these
21 subjects on the phone with Mr. Archer.

22 BOARD MEMBER BURROUGHS: I wasn't asking for you
23 to respond to Mr. Archer. I was asking for comments to me
24 on the subject matter on each of these letters.

25 GENERAL MANAGER PUNIA: I'm not prepared at this

1 time. I need to reread the letters. Maybe I can give you
2 a call or maybe at the next Board meeting. What's your
3 preference? I would be glad to discuss that with you.

4 BOARD MEMBER BURROUGHS: That would be great.
5 Thank you.

6 PRESIDENT CARTER: Very good. Anything else?
7 Okay. Then we are adjourned.

8 (Thereupon the California Reclamation Board
9 meeting adjourned at 5:30 p.m.)

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CERTIFICATE OF REPORTER

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4

I, KATHRYN S. KENYON, a Certified Shorthand Reporter
of the State of California, do hereby certify:

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That I am a disinterested person herein; that the
foregoing Reclamation Board Meeting was reported in
shorthand by me, Kathryn S. Kenyon, a Certified Shorthand
Reporter of the State of California, and thereafter
transcribed into typewriting.

10

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12

I further certify that I am not of counsel or
attorney for any of the parties to said meeting nor in any
way interested in the outcome of said meeting.

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IN WITNESS WHEREOF, I have hereunto set my hand this
31st day of May, 2007.

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KATHRYN S. KENYON, CSR

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Certified Shorthand Reporter

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